# TOWARDS PRO-CONSERVATION ATTITUDES AND BEHAVIOUR BY LOCAL COMMUNITIES BORDERING PROTECTED AREAS IN SOUTH AFRICA

by

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# DECLARATION

I declare that "TOWARDS PRO-CONSERVATION ATTITUDES AND BEHAVIOUR BY LOCAL COMMUNITIES BORDERING PROTECTED AREAS IN SOUTH AFRICA" is my own work, and that all the sources used or quoted have been indicated and acknowledged by means of complete references.

D R Queiros

Student no: 55777767 December 2019

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*"A land that the Lord your God cares for. The eyes of the Lord your God are always upon it, from the beginning of the year to the end of the year".*

(Deuteronomy 11:12)

To God, who created our awesome African wildlife and their beautiful habitats, of which we have been given custodianship. To a God who has a passion for people. May we have wisdom in finding ways to meet the needs of both.

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# ABSTRACT

Protected areas in South Africa are often surrounded by impoverished communities. Biodiversity must be conserved while improving community wellbeing. An increased understanding of key influences on pro-conservation attitudes and behaviour is essential for the future of successful conservation and the creation of realistic solutions for poor communities. Knowledge gaps exist regarding intangible benefits and losses, as well as the relationship between benefits, losses and pro-conservation attitudes and behaviour. Furthermore, there are less qualitative studies in this field than quantitative, nor are there many that include the perspective of park staff.

This research followed a novel comparative multiple-method qualitative approach, using contrasting case studies and borrowing from grounded theory. Three nature reserves were selected, each involving two constituencies – (i) the local community and (ii) protected area staff. Individual interviews, focus group interviews, mapping, and adapted nominal grouping technique were used to collect data. The data were first analysed question-by-question for each case study, followed by cross-case analysis which resulted in meta-themes for each research objective.

In each case study, benefits and losses were ranked to indicate their level of importance. Key tangible benefits were employment, access to natural resources and support for schools. Intangible benefits drew less focus, but comprise key influences, such as visiting the park, environmental education, information dissemination, and involvement. These benefits emerged again as aspects that would improve future positivity if more of each could be provided. Key losses were lack of/limited access to the reserve as visitors, insufficient employment, fear of wild animals and lack of involvement/interaction. Findings indicate that communities have a range of responsibilities towards the reserve (some of which are self-imposed), and a strong sense of custodianship. Exclusion from responsibility led to negative attitudes. Good relationships resulted in fewer poaching incidents, although locals are hesitant to report subsistence poaching. Areas of non-alignment between the perceptions of both constituencies highlight areas for rectification, such as parks acknowledging the losses perceived by communities; knowing which benefits are most important to communities; and highlighting benefits not mentioned by communities.

The meta-themes were used to construct a data-derived 'Theory of Influences on Pro-conservation Attitudes and Behaviour', which indicates how relationship is shaped by benefits, losses, detractors and facilitators; and includes solutions to increase positive attitudes. To drive practical application of the theory, recommendations for park managers and local communities are provided. Finally, this study was integrated with existing literature to develop the 'People-Parks Win-Win Framework' – a comprehensive representation of the influences on people-park relationships – which has not been done before. The study makes methodological, theoretical and practical contributions. Its findings can facilitate people-park win-wins, aiding both biodiversity conservation and community wellbeing.

**Keywords**: Case studies; community wellbeing; local community; losses; people-park relationship; People-Parks Win-Win Framework; pro-conservation attitudes and behaviour; protected area; qualitative; reserve staff; tangible and intangible benefits; tourism.

# SETSOPOLWA

Mafelo ao a šireleditšwego ka Afrika Borwa gantši a dikaneditšwe ke ditšhaba tšeo di hlokago. Diphedi tšeo di fapafapanego di swanetše go babalelwa mola ka go le lengwe re kaonafatša go phela gabotse ga ditšhaba. Kwešišo ye e oketšegilego ya dilo tše bohlokwa tše di huetšago maikutlo ao a thekgago pabalelo ya diphedi le maitshwaro e bohlokwa go bokamoso bja pabalelo ye e atlegilego le go hloma ditharollo tše di kwagalago go ditšhaba tše di hlokago. Tlhokego ya tsebo e gona mabapi le dikholego le ditahlegelo tšeo di sa bonagalego, gammogo le kamano magareng ga dikholego, ditahlegelo le maikutlo ao a thekgago pabalelo ya diphedi le maitshwaro. Godimo ga fao, go na le dinyakišišo tše mmalwa ka ga boleng ka mo lefapheng le go fetwa ke dinyakišišo ka ga bontši, ebile ga go na le tše ntši tšeo di akaretšago maikutlo a bašomi ba ka dirapeng tša diphoofolo.

Dinyakišišo tše di latetše mokgwa wa papetšo wa mekgwa ye mentši ya dinyakišišo ka ga boleng, ka go šomiša dinyakišišo tša seemo tšeo di thulanago le go adima go teori yeo e tlogago e theilwe ka mabaka. Mafelo a pabalelo ya diphedi a mararo a kgethilwe, le lengwe le le lengwe le akaretša bakgathatema ba babedi ka go lona – (i) setšhaba sa kgauswi le (ii) bašomi ba lefelo leo le šireleditšwego. Batho ka o tee ka o tee ba ile ba botšišwa dipotšišo, dihlopha tše di nepišitšwego le tšona di ile tša botšišwa dipotšišo, go hlaola, le mokgwa wo o fetošitšwego wa go hlopha ka maina di šomišitšwe go kgoboketša tshedimošo. Tshedimošo e thomile ka go sekasekwa go ya ka potšišo ye e botšišitšwego go dinyakišišo tša seemo, gwa latela tshekatsheko ya dinyakišišo tše di fapafapanego yeo e feleleditšego ka merero ye megolo go maikemišetšo a mangwe le a mangwe a dinyakišišo.

Ka go dinyakišišo tše dingwe le tše dingwe tša seemo, dikholego le ditahlegelo di ile tša bewa ka maemo go laetša maemo a bohlokwa bja tšona. Dikholego tše bohlokwa tšeo di bonagalago di ile tša dirišwa, gwa ba le phihlelelo go methopo ya tlhago le thekgo ya dikolo. Dikholego tšeo di sa bonagalego di ile tša ba le šedi ye nnyane, eupša tša ba le dikhuetšo tše bohlokwa, tša go swana le go etela serapeng sa diphoofolo, thuto ya tikologo, go phatlalatša tshedimošo, le go kgatha tema. Dikholego tše di tšweletše gape bjalo ka dikokwane tšeo di tlago kaonafatša maikutlo a makaone a ka moso ge e le gore tše ntši tša tšona di tla abja. Ditahlegelo tše bohlokwa e bakilwe ke tlhokego ya phihlelelo/phihlelelo ye nnyane ya go tsena ka dirapeng tša diphoofolo ka baeti, tlhokego ya mešomo, go tšhaba diphoofolo tša lešoka le tlhokego ya go kgatha tema/tirišano. Dikutollo di laetša gore ditšhaba di na le maikarabelo a mehutahuta go dirapa tša diphoofolo (a mangwe maikarabelo ke a go ithaopa ga setšhaba), le maikutlo ao a tiilego a go di hlokomela. Go se akaretše ditšhaba go maikarabelo a go feleleditše ka maikutlo ao a sego a loka. Dikamano tše botse di feleleditše ka ditiragalo tše mmalwa tša go bolaya diphoofolo ke bao ba nyakago manaka a tšona, le ge e le gore badudi ba dikadika go bega go bolaya diphoofolo ke bao ba inyakelago nama ya tšona. Makala a go se sepelelane magareng ga maikutlo a bakgathatema ka bobedi a laetša fao go swanatšego go phošollwa gona, go swana le ge dirapa tša diphoofolo di dumela ditahlegelo tšeo di bonwago ke ditšhaba; di tseba gore ke dikholego dife tše di lego bohlokwa kudu go ditšhaba; le go laetša dikholego tše di sego tša bolelwa ke ditšhaba.

Mereo ye megolo e ile ya šomišwa go hlama ‘Teori ya dikhuetšo ye e tšwago tshedimošong ka ga Maikutlo le Maitshwaro ao a Thekgago Pabalelo ya diphedi’, yeo e laetšago ka fao kamano e bopšago ke dikholego, ditahlegelo, disenyi le basepediši; ebile e akaretšago ditharollo tša go oketša maikutlo a

makaone. Go tšwetša pele tirišo ye e phathagatšwago ya teori ye, balaodi ba dirapa tša diphoofolo le ditšhaba ba ile ba fiwa ditšhišinyo. Mafelelong, dinyakišišo tše di ile tša tsenywa ka gare ga dingwalwa tšeo di lego gona ka nepo ya go hlama 'Melawanatheo ya Dirapa tša Diphoofolo tša go Thekgwa ke Batho tšeo di Holago Bohle' – e lego kemedi ye e akaretšago bohle ka ga dikhuetšo tša dikamano tša dirapa tša diphoofolo tša go thekgwa ke batho – e lego seo se sego sa ka sa dirwa mo nakong ye e fetilego. Dinyakišišo tše tsenya letsogo ka ga mekgwa, teori le tirišo. Dikutollo tša tšona di ka nolofatša kholego ya bohle go dirapa tša diphoofolo tša go thekgwa ke batho, tša thuša bobedi pabalelo ya diphedi tšeo di fapafapanego le go phela gabotse ga setšhaba.

**Mantšu a bohlokwa**: Dinyakišišo tša seemo; go phela gabotse ga setšhaba; setšhaba sa kgauswi; ditahlegelo; dikamano tša dirapa tša diphoofolo; melawanatheo ya dirapa tša diphoofolo tša go thekgwa ke batho tšeo di holago bohle; maikutlo le maitshwaro ao a thekgago pabalelo ya diphedi; lefelo leo le šireleditšwego; ya boleng; bašomi ba ka dirapeng tša diphoofolo; dikholego tšeo di bonagalago le tšeo di sa bonagalego; boeti.

# ISISHWANKATHELO

Imimandla ekhuselekileyo eMzantsi Afrika ikholisa ukungqongwa yimiphakathi ehluphekileyo. Indalo esingqongileyo kufuneka ilondolozwe lo gama kuphuculwa intlalontle yoluntu. Kubaluleke kakhulu ukwanda kokuqonda imiba enefuthe kwiindlela zokucinga nokuziphatha malunga nolondolozo lwendalo ukuze kubekho impumelelo ekulondolozeni indalo, kudaleke nezisombululo ezisebenzayo kwimiphakathi ehluphekileyo. Kukho izikhewu kulwazi olumalunga noncedo nelahleko, kwanolwalamano phakathi koncedo, ilahleko neendlela zokucinga nokuziphatha. Ngaphaya koko, zimbalwa izifundo ezingqiyame kakhulu kwingxoxo nengcaciso kunezifundo ezingqiyame kumanani, kwaye zimbalwa eziqwalasela izimvo zabasebenzi bamaziko ekugcinwa kuwo indalo.

Olu phando lunesimbo esitsha esiqhutywa ngokuthelekisa iindlela zophando eziliqela, kusetyenziswa izifundo ezisekelwe kumava neengcingane/iithiyori ezaziwayo. Kukhethwe amaziko endalo amathathu apho kubandakanywe amacandelo amabini kwiziko ngalinye – (i) uluntu lwendawo kunye (ii) nabaqeshwa bommandla okhuselweyo. Ulwazi okanye idatha luqokelelwe ngezi ndlela zilandelayo: Kwaqhutywa udliwano ndlebe nabantu bengabanye, bengamaqela ekugxininiswe kuwo, kwalandeliswa ngokuthelekisa okuqikelelweyo nokwenzekileyo kunye nokudibanisa amaqela ukuze axukushe imiba ekuphandwa ngayo. Iinkcukacha zolwazi eziqokelelweyo zahlalutywa ngokuthi kuqwalaselwe iimpendulo zombuzo ngamnye kule yemizekelo yamava omntu ngamnye, kwalandeliswa ngokuthelekisa iimeko namava abantu ngabantu, nto leyo eyaveza imixholo ebanzi kwinjongo nganye yesifundo sophando.

Kwisifundo samava ngasinye kwalandelelaniswa uncedo nelahleko ngokokubaluleka kwazo. Izinto eziluncedo ezaqwalaselwayo yaba yimpangelo, ukufikelela kwimithombo yendalo nenkxaso yezikolo. Uncedo olungabambekiyo zange luqwalaselwe ngokungamandla kodwa lunefuthe eliphambili njengokutyelela amaziko endalo, ukufundiswa ngokusingqongileyo, ukusasazwa kolwazi nokuthatha inxaxheba. Ezi ndidi zoncedo zaphinda zavela njengamanqanaba aya kuphucula ukuzijonga ngethemba izinto xa kunokwenziwa ukuba zibe khona. Ilahleko yaba kukunqongophala kwendlela yokufikelela kwiziko njengeendwendwe, ukunqaba kwamathuba empangelo, ukoyika izilo zasendle nokungabikho kwamathuba okuthatha inxaxheba. Okufunyanisiweyo kudiza ukuba uluntu lunoxanduva oluziindidi ezahlukeneyo kwiziko (olunye uxanduva bazinike ngokwabo), kwaye luzibona lungabagcini bendawo. Ukunganikwa uxanduva kwakhokelela ekucingeni gwenxa. Intsebenziswano yakhokelela ekuncipheni kweziganeko zokuzingela ngokungekho mthethweni, nangona abahlali bendawo bemathidala ukuxela abantu abazingelela ukuzondla. Iindawo zokuhlabana kwezimvo zamacala omabini zidulisa amanqanaba afanele ukulungiswa, njengokuba amaziko endalo ayiqonde imeko ebonwa njengelahleko luluntu lwendawo; aqonde nokuba zeziphi izinto ezibalulekileyo nezibonwa njengoncedo luluntu; acacise nezinto eziluncedo ezingabalulwanga luluntu lwendawo.

Imixholo ebanzi (*meta-themes*) yasetyenziselwa ukuqweba 'Ingcingane Yefuthe Elenzeka Kwiimbono Nokuziphatha' ('*Theory of Influences on Pro-conservation Attitudes and Behaviour*'), nebonakalisa ukuba izinto eziluncedo, ilahleko, iziphazamiso nabaququzeleli zilubumba njani ulwalamano. Kwakhona, le ngcingane iquka izisombululo zokwandisa iingcinga ezintle. Kunikwe iingcebiso kubaphathi beziko lendalo nakuluntu lwendawo ukuze kuphuhliswe iindlela ezibonakalayo zokusebenzisa le ngcingane.

Okokugqibela, esi sifundo sixutywe noncwadi oselukho ngenjongo yokuphuhlisa ‘Isakhelo Sempumelelo Yentsebenziswano Kuluntu Namaziko Endalo’ (‘*People-Parks Win-Win Framework*’) – lo ngumbhalo oveza ifuthe lentsebenziswano yoluntu namaziko endalo – nto leyo ingazange ibekho ngaphambili. Esi sifundo sifaka igxalaba ngobuchule, ngengcingane nangomsebenzi ophathekayo. Okufunyaniswe apha kunakho ukudala impumelelo kwintsebenziswano yokuntu namaziko endalo, sincede ulondolozo lwendalo nentlalontle yoluntu.

**Amagama aphambili**: Izifundo zamava; intlalontle yoluntu; uluntu lwendawo/umphakathi; ilahleko; intsebenziswano yoluntu namaziko endalo; Isakhelo Sempumelelo Yentsebenziswano Kuluntu Namaziko Endalo; iimbono nokuziphatha kakuhle kulondolozo lwendalo; ummandla okhuselekileyo; exhaswe ziingxoxo; abaqeshwa beziko lendalo; uncedo olubambekayo nolungabambekiyo; ukhenketho.

# NGAMAFUPHI

Izindawo ezivikelekile eNingizimu Afrika kaningi zihaqwe yimiphakathi entulayo. Izinto ezahlukahlukene eziphilayo kufanele zilondolozwe kanti ngakolunye uhlangothi sibe sesifafaza ivangeli lempilo ephephile emiphakathini. Ulwazi oluningi lwemithelela esemqoka emayelana nommoya kanye nemikhuba yokulondoloza kwemvelo kubalulekile kwikusasa lokwakha uhlelo olluyimpumelelo lokulondoloza kwemvelo kanye nokwakha amasu empilo yangempela okusiza imiphakathi edla imbuya ngothi. Kukhona ukwedlulana okumayelana nezinzuzo ezingabonakali ngamehlo kanye nokulahlekelwa, kanye nobudlelwano obuphakathi kwezinzuzo, kokulahlekelwa kanye nemmoya kanye nemikhuba ehlose ukulondoloza imvelo. Ngaphezu kwalokho, kunezifundo ezincane zocwaningo olugxile kwizingxoxo kulo mkhakha, uma seziqhathaniswa nezifundo zocwaningo olugxile kumanani, kanti kunjalo-nje izifundo zocwaningo eziningi azixubi umqondo wabasebenzi.

Lolu cwaningo luye lwalandela indlela embaxaningi yokuqhathanisa egxile kwizingxoxo, ngokusebenzisa izifundo zocwaningolotho eziphikisanayo futhi ziye zaqhubeka nokuboleka amasu kwimiqondo egxilile. . Kuye kwakhethwa iziqiwu zokulonda izilwane ezintathu, esinye nesinye isiqiwu sinezakhamuzi zendawo – (i) umphakathi oyizakhamuzi kanye (ii) nendawo evikelekile yabasebenzi. Kuye kwasetshenziswa izinhlelo zenhlolovo yomuntu ngamunye, ukumepha, kanye nezindlela zemibuzo eshicilelwe zemibono yamaqembu, konke lokhu kuye kwasetshenziswa ukuqoqa idatha. Okokuqala idatha iye yahlaziywa ngokwemibuzo ngamunye kolunye nolunye ucwaningolotho, okuye kwalandelwa yindlela yokuhlaziya eyaziwa phecelezi nge*cross-case analysis* okuyindlela edale ukuba kube nezindikimba ezibizwa nge*meta-themes* zenhloso enye nenye yocwaningo.

Kolunye nolunye ucwaningo, izinzuzo kanye nokulahlekelwa kuye kwabekwa ngokulandelana ukuze kuvezwe amazing okubaluleka. Izinzuzo ezisemqoka eziphathekayo kuye kwaba ukusebenza, ukwazi ukuthola imithombo yemvelo kanye nokuxhaswa kwezikole. Izinzuzo ezingaphathekiyo akugxilwanga kakhulu kuzo, kodwa nazo ziqukethe imithelela esemqoka, enjengokuvakashela izindawo zokungcebeleka, ukuhlinzekwa ngemfundo yezemvelo, ukusakazwa kolwazi kanye nokubandakanyeka. Lezi zinzuzo ziye zavela futhi njengezinto ezizothuthukisa ikusasa eliqhakazile uma ngabe konke lokhu kuyalandelwa. Ukulahlekelwa okuphawulekayo kuye kwaba ukusweleka/ukufinyeleleka kancane kwezivakashi esiqiwini sezilwane, ukuqashwa kwabasebenzi benani eliphansi, ukwesaba izilwane zasendle kanye nezinga lokusweleka kokubandakanyeka/nokungahlangani. Ulwazi olutholakele luveza ukuthi imiphakathi inezindima eziningi okufanele iziidlale kwiziqiwu ezilondoloza imvelo (ezinye izindima yilezo ezizibeke phezu kwamahlombe omphakathi) kanye nokuba nesasasa lokunakekela imvelo. Kanti ukungabandakanywa komphakathi kuye kwaholela ekutheni umphakathi ube nommoya ongemuhle kulezi ziqiwu. Ubudlelwano obuhle buye baholela ekutheni kube nenani eliphansi lezehlakalo zokubulawa kwezilwane, yize abantu bezindawo ezisondelene neziqiwu beba nokuthandabuza uma kufanele babike izehlakalo zokubulawa kwezilwane. Ukungasebenzisani phakathi kwezinhlanga ezimbili, izakhamuzi kanye namalungu eziqiwu zezilwane kuveza amaphutha okufanele alungiswe, anjengokuthi iziqiwu lezi zibe nolwazi ngokulahlekelwa komphakathi; zazi ukuthi ngiziphi izinzuzo ezibalulekile emphakathini; futhi ziveze izinzuzo ezingavezwanga wumphakathi.

Izinhlaka phecelezi ezingama *meta-themes* zisetshenzisiwe ukwakha ithiyori esuselwe kwidatha, phecelezi '*Theory of Influences on Pro-conservation Attitudes and Behaviour*', okuveza indlela ubudlelwano obakhiwa ngayo yizinzuzo, ukulahlekelwa, yizihibhe kanye nabancedisi; kanti lokhu kuxuba izixazululo eziqonde ukwengeza ummoya omuhle. Ukuze kusetshenziswe imiqondo ngendlela ebonakalayo , kuye kwalandelwa izincomo zabaphathi beziqiwi kanye nezakhamuzi eziseduze neziqiwu. Okokugcina, lolu cwaningo luye lwahlanganiswa nombhalo wobuciko obevele ukhona ukwakha phecelezi '*People-Parks Win-Win Framework*' – uhlelo olubanzi oluxuba zonke izinhlaka olunemithelela yemibono yezinhlelo zobudlelwano babantu kanye neziqiwu zezilwane – okuyinto engakaze yenziwe ngaphambilini. Ucwaningo luye lwaba negalelo kwindlela yokucwaningo (*methodological*), kwimiqondo kanye namagalelo abonakalayo. Okutholwe wucwaningo kunganceda ukuhlela uhlelo lapho kuzuza abantu kanye neziqiwu, lokhu kunganceda zombili izinhlaka ukulondolozwa ephilayo ehlukahlukene kanti futhi kungadala inhlalakahle emphakathini.

**Amagama asemqoka**: Ucwaningo lotho; inhlakakahle yomphakathi; umphakathi/izakhamuzi zendawo;ukulahlekelwa; ubudlelwano babantu bendawo kanye nesiqiwu; Uhlelo lweSakhiwo saBantu kanye nesiQiwu; ummoya wothando kanye nezenzo nokuziphatha kahle kwesiqiwu; indawo evikelekile; indlela egxile kwingxoxo;abasebenzi basesiqiwini sezilwane;izinzuzo ezibonakalayo/eziphathekayo nezingabonakali/nezingaphathekiyo; uhlelo lwezokuvakasha.

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| ANC | African National Congress |
| C1 | Constituency 1 (Local community) |
| C2 | Constituency 2 (Conservation managers, conservationists and those involved in tourism) |
| CAQDAS | Computer Assisted Data Analysis System |
| CBC | Community-Based Conservation |
| CBD | Convention on Biological Diversity |
| CBET | Community-Based Ecotourism |
| CBNRM | Community-Based Natural Resource Management |
| CBT | Community-Based Tourism |
| CBTI | Community Benefit Tourism Initiative |
| CLEF | Community Leaders Education Fund |
| DFID | British Department for International Development |
| DGR | Dinokeng Game reserve |
| DGR/KG | Dinokeng Game Reserve/Kekana Gardens (Case study 1) |
| ECPTA | Eastern Cape Parks and Tourism Agency |
| EEP | Environmental Education Programme |
| F | Female |
| FGI | Focus Group Interview |
| ICDP | Integrated Conservation and Development Project |
| II | Individual Interview |
| IPAB | Theory of Influences on Pro-conservation Attitudes and Behaviour |
| IQA | Interactive Qualitative Analysis |
| IUCN | International Union for the Conservation of Nature |
| IWP | iSimangaliso Wetland Park |
| LAC | Land Owners Association |
| LC | Local Community |
| KZN | KwaZulu-Natal |
| M | Male |
| MEC | Member of Executive Council |
| MLT | Mkhambathi Land Trust |
| MNR | Mkhambathi Nature Reserve |
| MNR/K | Mkhambathi Nature Reserve/Khanyayo (Case study 2) |
| MT | Meta-theme |
| NAM | Norm Activation Model |
| NEMA | National Environmental Management Act |
| NEMBA | National Environmental Management: Biodiversity Act 10 of 2004 |
| NEMPA | National Environmental Management: Protected Areas Act 57 of 2003 |
| NEP | New Environmental Paradigm Scale |
| NGO | Non-Governmental Organisation |
| NGT | Nominal Grouping Technique |
| NOAH | Nurturing Orphans of Aids for Humanity |
| NPAES | National Protected Area Expansion Strategy for South Africa, 2016 |
| OVC | Orphans and Vulnerable Children |
| PA | Protected Area |
| PES | Payment for Environmental Services |
| PGR | Phinda Private Game Reserve |
| PGR/M | Phinda Private Game Reserve/Mnqobokazi (Case study 3) |
| PhD | Doctor of Philosophy |

**LIST OF ABBREVIATIONS** *(continued)*

| | |
|---|---|
| PPWW | People Parks Win-Win Framework |
| RG | Research Gap |
| RO | Research Objective |
| SANParks | South African National Parks |
| SATSA | South African Tourism Services Association |
| SEIIP | Strategic Economic Infrastructure Investment Programme |
| SMME | Small Medium Micro Enterprise |
| Stats SA | Statistics South Africa |
| TOMSA | Tourism Marketing South Africa |
| TPB | Theory of Planned Behaviour |
| TRA | Theory of Reasoned Action |
| TRACOR | Transkei Agricultural Corporation |
| TTA | Thaweni Tribal Authority |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| Unisa | University of South Africa |
| VBN | Value-Belief-Norm Theory of Environmentalism |

Note: Abbreviations specific to the case study chapters (4, 5 and 6) are provided in Section 3.10.3.

# Chapter 1
# Introduction

*"We can't save everything – it's too late for that … To combat today's pressures … community-owned wildlife conservancies must be created as buffer zones around Africa's parks … in order to protect considerably more, better managed land for conservation. At the same time this will result in a steady income for communities and create safe havens for wildlife. The only alternative is that rural communities will take the wildlife … into their cooking pots".*

(Colin Bell in Passage to Africa, 2013:n.p.)

## 1.1 Context of the research

The conservation crisis, accompanied by impoverished communities on the verges of protected areas, creates a severe challenge. The natural environment globally is losing biodiversity, making increased conservation of protected areas essential to halt this loss (Abrams, Anwana, Ormsby, Dovie, Ajagbe & Abrams, 2009; Allen, Holland, Holland, Tome, Nabaala, Seno & Nampushi, 2019). At the same time, most of the protected areas in Africa (including South Africa) are surrounded by poor communities (Davies, Fazey, Cresswell & Pettorelli, 2014; Shackleton, Willis, Brown & Polunin, 2010) and are experiencing an increase in illegal harvesting of natural resources (Mutanga, Muboko & Gandiwa, 2017). Coupled with this, the contentious land debate in South Africa is creating uncertainty regarding the future of land tenure.

Over the decades, various management models have been pursued globally which impact on biodiversity conservation of protected areas and the wellbeing of communities surrounding such areas. Since the 1970s, a shift has occurred in biodiversity management, moving from the top-down 'fences and fines' or 'fortress' approaches, where conservation is implemented by law enforcement, to a more bottom-up collaborative flexible community-based, people-friendly approach (Davies *et al.*, 2014; Stoll-Kleemann, 2005). The past two decades have ushered in the third round in this debate, where criticism has been levied against the participatory approach, with conservationists becoming increasingly concerned that conservation is being negatively impacted (McShane, Hirsch, Trung, Songorwa, Kinzig, Monteferri, Mutakanga, Thang, Dammert, Pulgar-Vidal, Welch-Devine, Brosius, Copolio & O'Connor, 2011). A minority advocate a return to the 'fences and fines' approach (Licona, McCleery, Collier, Brightsmith & Lopez, 2011; McShane *et al.,* 2011), while the majority are opting for adaptive management, where, depending on individual circumstances within a protected area, a combination of top-down and bottom-up management is used, i.e. a mix of effective enforcement with participation and beneficiation (Berkes, 2004; Saufi, O'Brien & Wilkins, 2014; Stoll-Kleemann, 2005). Wilhere (2002) explains adaptive management as active adaptive or experimental approaches to management. While the challenge is a global one, this study is situated within South Africa, and seeks to contribute to

adaptive management by identifying the components needed to achieve win-win solutions between people and the parks on their borders, so that community wellbeing improves and wildlife does not end up in the cooking pot.

## 1.2 Research gaps

The future success of conserving wildlife and their habitats depends on the attitudes and behaviour of communities living in and around protected areas (Snyman, 2014). However, greater insight into the influences on pro-conservation attitudes and behaviour is first required, i.e. what makes local people want to conserve and engage in pro-environmental behaviour? (Berkes, 2004; Coria & Calfucura, 2012; Imran, Alam & Beaumont, 2014; Kiss, 2004; Mbaiwa & Stronza, 2010; Walpole & Goodwin, 2001). Ferse, Máñez Costa, Máñez, Adhuri and Glaser (2010:7) put it this way: "A deeper understanding of what drives positive conservation behaviour and what hampers it, is needed".

Much appears to rest on the relationship between protected area staff and the local communities surrounding the parks. In South Africa, in spite of growing literature regarding protected area management, there is still limited understanding of the perceptions of park officials and local communities on their inter-relationships (Thondhlana & Cundill, 2017). McCleave, Espiner and Booth (2006) note the importance of this issue but add that there is a shortage of theory on people-park relationships. They caution that failure to acknowledge this important relationship can cause barriers to effective management, can result in the community resenting conservation, and can lead to reduced social wellbeing and lost tourism opportunities. Stoll-Kleemann (2005) urges better relationships between protected areas and surrounding communities, in order to further effective protected area management. These authors advocate that pragmatic integration of the interests of protected areas and the interests of surrounding communities, is urgently required.

Pragmatic integration, however, requires achievement of the dual goals of biodiversity conservation and improvement in the wellbeing of communities bordering protected areas (Davies *et al.*, 2014; Ferse *et al.*, 2010). This is necessary to impact positively on the biodiversity and poverty crises. Yet, as pointed out by Wali, Alvira, Tallman, Ravikumar and Macedo (2017), much work remains to be done on how to integrate biodiversity conservation and human wellbeing. In addition, solutions need to be realistic, taking into consideration the very real constraints faced by protected areas in South Africa. The study refers to achieving this pragmatic integration as finding middle ground between these two stakeholders.

Therefore, the **overarching research gap (research problem)** identified for this study, is the crucial need to achieve both biodiversity conservation and improved wellbeing for communities bordering protected areas. Yet, this is dependent on the attitudes and behaviour of local people, and there is limited knowledge concerning the influences on attitudes and behaviour. Moreover, although the relationship between protected area management and the local community is vital, limited theory exists on this

matter. These gaps in knowledge can make it difficult to achieve the goals of both conservation and human wellbeing, i.e. the attainment of middle ground between protected areas and local people.

Within this overarching research gap, **five individual research gaps (research problems)** were identified. These are listed below, but are elaborated in Chapter 2.

1. There is lack of consensus on the relationship between benefits, losses/costs, pro-conservation attitudes and pro-conservation behaviour.
2. Inadequate knowledge exists regarding benefits and losses/costs, with even less focus on intangible benefits as well as losses/costs.
3. Most studies focus on local communities and few include the perspective of conservationists and those involved in managing tourism within protected areas.
4. Less studies in this field are purely qualitative.
5. A comprehensive integrated framework which optimally represents the components that could influence people-park relationships, does not exist.

The **relevance of this research** lies in bridging these research gaps. Using a novel qualitative research approach that includes the perspectives of both communities and those involved in protected areas, components that influence pro-conservation attitudes and behaviour progressively emerge via various layers of analysis and interpretation. These components hold practical value in terms of aiding the achievement of biodiversity conservation and human wellbeing, and in so doing improving the relationship and finding middle ground. This work will be of value to practitioners in the field of conservation and community development and will also be of interest to academics.

## 1.3 Research question, aim and objectives

This section embodies the focus of the study. The research question is "What are the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas, from the perspectives of both the local communities and reserve staff, and how can these be optimally represented?" The aim of this study is to **identify, investigate and represent the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas**. This is done via three contrasting case studies in South Africa using a variant of grounded theory. It considers the opinions of both the local communities and reserve staff. The latter refers to staff involved in conservation or tourism at the reserve.

To answer the research question, achieve the research aim, and in so doing to address the research gaps set out in the literature review, several research objectives have been identified. Research Objectives 2 to 6 are carried out in each of the three case studies, while Research Objectives 7 and 8 cut across all three case studies.

The research objectives are to:

1. Review literature regarding the influences on pro-conservation attitudes and behaviour.
2. Probe the knowledge and experiences of community members regarding the protected area.
3. Seek to understand the relationship between the local community and the protected area.
4. Identify the benefits received by and losses/costs incurred by the local community due to the presence of the protected area, as well as other factors that could influence the attitudes and behaviour of the community towards the protected area.
5. Explore the responsibilities of the community towards the protected area and the responses these evoke.
6. Discover what could be done differently in future in order to improve the positivity of the local community towards the protected area, and to improve future relationships.
7. Use the data derived from this study to:
    7.1 construct a middle-range substantive theory that attempts to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions that give rise to pro- or anti-conservation attitudes and behaviours.
    7.2 develop recommendations for implementation of the theory for both the communities and the managements of protected areas, in order to facilitate a positive relationship, aiming for improved achievement of the dual goals of biodiversity conservation and community wellbeing.
8. Develop a comprehensive integrated framework representing the components that can influence people-park relationships.

## 1.4 Research design and methodology

The overarching research approach is qualitative in order to explore participants' feelings, opinions and perceptions in their own words (Roulston, 2014). The research is predominantly situated in the paradigm of constructivism/interpretivism, which accepts that individuals will have multiple subjective interpretations of their world (Creswell, 2014). Findings are discovered through the interaction between individuals as well as through interaction with the researcher (Bann, 2001), and are largely inductive (Creswell, 2014). The research also borrows from the paradigm of pragmatism, a worldview which gives the researcher freedom to choose the best ways in which to answer the research objectives (Cohen, Manion & Morrison, 2011), and in which to analyse and interpret the data (Saunders, Lewis & Thornhill, 2009).

The research design involves case studies and a variant of grounded theory, with each being equally important. For the case studies, multiple (three) contrasting cases were selected. Within each case study, two groups of people (constituencies) took part in the research and this is explained in Section 1.5. Each case study was first analysed and interpreted separately. Furthermore, comparisons were

drawn between the two constituencies. Later, in cross-case analysis, the three case studies are compared to each other. The case studies are therefore the vehicle through which the data was gathered. The case study research design allowed the researcher to investigate and describe phenomena in the environments of the various participants (Yin, 2009), and the use of multiple cases added depth (Miles, Huberman & Saldaña, 2014). As is the situation with grounded theory, a case study approach aims to develop theory (Darke, Shanks & Broadbent, 1998).

In terms of following a variant of grounded theory: the researcher accepts that prior theoretical knowledge will inform the research (Thornberg & Charmaz, 2014); it is acknowledged that the process is inevitably influenced by the researcher (Charmaz, 2017), but attempts are made to limit this influence; use is made of a preliminary literature review to provide multiple lenses on the territory being studied (Thornberg & Charmaz, 2014); and open inductive coding is employed (Grbich, 2007; Pope, Ziebland & Mays, 2000). This research aligns with original grounded theory (according to Glaser and Strauss, 1967) in the sense that the researcher does not commence the study with an existing model, theory or framework with which the research will be aligned. The researcher comes to the field without this restriction, so that the data can speak for itself (Mertens, 1998). Furthermore, the research aligns with grounded theory in that data collection was pragmatic (Thornberg & Charmaz, 2014); interpretations are supported by data (quotes) (MacQueen & Namey, 2012) and data-based summaries (Thornberg & Charmaz, 2014); and a systematic structured series of analyses which included coding and categorisation (Cohen *et al.,* 2011) was followed. This process resulted in the construction of a theory, fully derived from primary data, gathered from participants in the real world from case studies fieldwork (Coles, Duval & Shaw, 2013; Strauss & Corbin, 1990). The resultant theory is a middle-range substantive theory. It is 'middle-range' because it combines concepts to explain a particular focus within the field of communities and conservation; and 'substantive' because it relates only to the abovementioned focus and is contextualised within the three case studies (Grbich, 2007). Following theory construction, the theory is compared with existing schema to validate the need thereof. To broaden applicability of the research, the final step combined the theory with existing literature to produce a comprehensive integrated framework.

Within the research designs (case studies and a variant of grounded theory), and in line with pragmatism, multiple methods were used to gather data (Cohen *et al.,* 2011; Wahyuni, 2012). These methods are semi-structured individual interviews, focus group interviews, adapted nominal grouping technique and mapping. The details are provided in Chapter 3. A qualitative data software package, Atlas.ti, was used to assist in managing and analysing the large body of data. Ethical clearance as per the requirements of the University of South Africa (Unisa) and the participating reserves was obtained and is explained in Chapter 3.

In summary, the research follows a novel comparative multiple-method qualitative approach using contrasting case studies and borrowing from grounded theory.

## 1.5 Study demarcation

This study consists of three case study sites within South Africa. South Africa is chosen since this is where the researcher lives and where her research interest currently lies. As shown in Chapter 2, there is also a need for this type of research in South Africa.

Each case study site comprises a protected area where a tourism venture exists, and the local community living closest to the protected area. In other words, within each case study, two groups of people (constituencies) took part in the research. **Constituency 1 (C1) refers to the local community living closest to the protected area.** In this research, the terms local community, local people, locals, community members and residents are used interchangeably for C1. **Constituency 2 (C2) refers to conservation authorities (such as the reserve manager), conservationists, as well as others involved in management of the tourism venture.** Although C2 involves different groups of people, they have been grouped into a single constituency as they all operate within the protected area under study and may have a role in determining the benefits and losses/costs received and incurred respectively by local people. Furthermore, all the C2 participants needed to have knowledge of the local community in C1, and be involved in that community, in order to participate in the study. In this research, C2 is collectively referred to as 'protected area management', 'park staff' or 'reserve staff'.

Wahyuni (2012) refers to the selection of cases being driven by the research aim. Three contrasting case studies were chosen in which the protected area had differing management models and ownership structures; and were at different stages in the level of improvement in human wellbeing offered to the adjacent community. This information is provided at the start of each case study. The contrasting cases enabled the researcher to determine how very different set-ups influence attitudes and behaviour related to conservation, and thereby to construct a more comprehensive theory, framework and set of recommendations. Beyond the above selection criteria, cases were selected based on convenience and proximity to the researcher's residence. The researcher does not claim to have covered all types of management models and ownership structures, and due to the in-depth analysis process followed for each case study, only three case studies could be done.

The cases are listed below and their locations within South Africa shown in Figure 1.1:

1. **Dinokeng Game Reserve and Kekana Gardens community;**
2. **Mkhambathi Nature Reserve and Khanyayo community; and**
3. **Phinda Private Game Reserve and Mnqobokasi community.**

Beyond the scope of this study are the details of the field of biodiversity conservation with its numerous policies, procedures, white papers and plans; as well the details of poverty studies, the communities' daily lives and livelihoods. The focus of the study is on the middle ground where local communities and protected areas overlap.

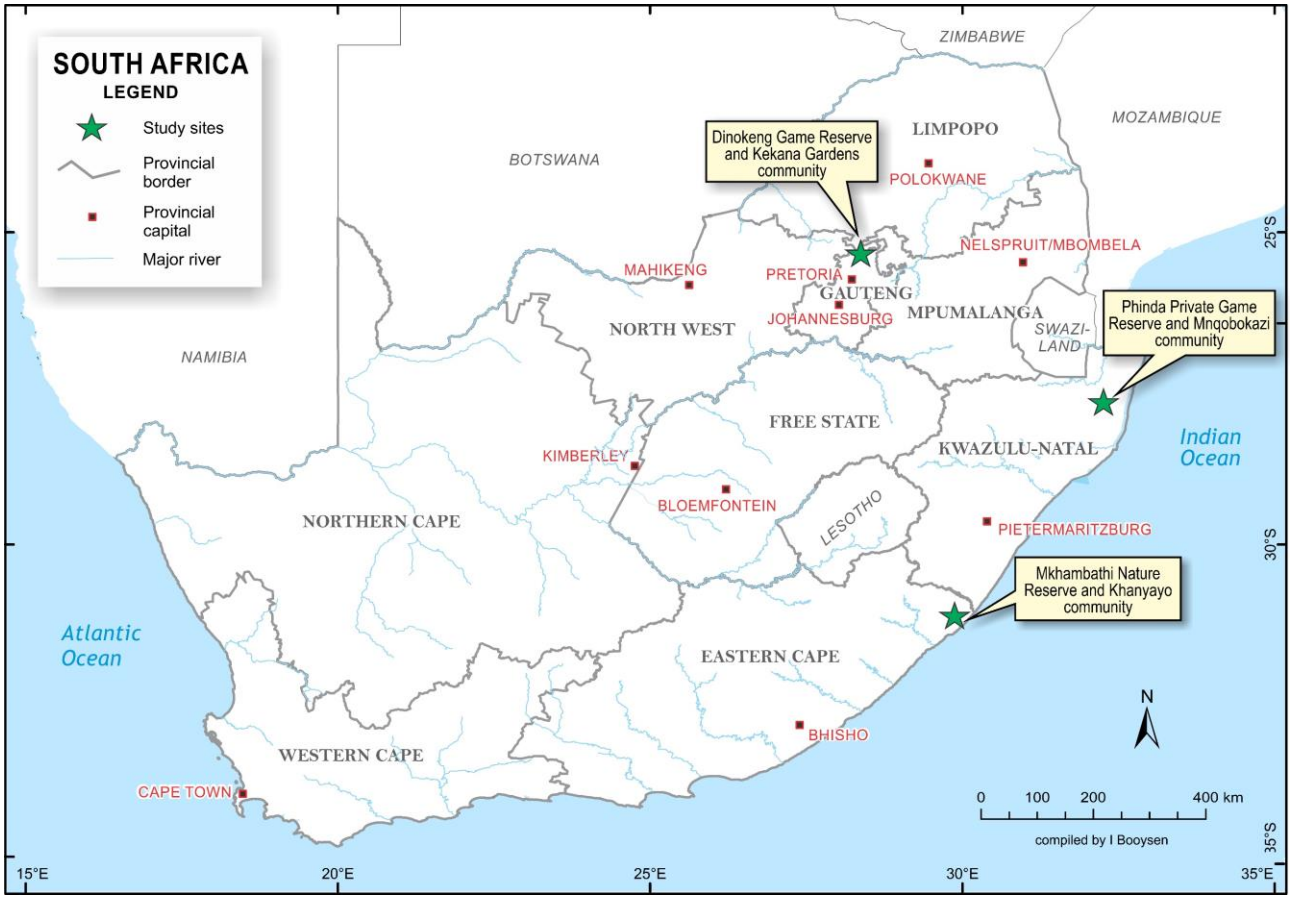



Figure 1.1: Location of case study sites within South Africa

## 1.6 Assumptions

It was assumed that all participants answered the questions truthfully. Evidence is taken at face value, assuming that "participants mean what they say and say what they mean" (Willig, 2014:137). Every effort was made to honour the data and be true to what participants meant.

## 1.7 Thesis layout

The thesis comprises the following chapters, set out in Figure 1.2. The numbers therein correspond with the respective chapters.

**Chapter 1** introduces the study, setting the context and outlining the research gaps, question, aim and objectives. It provides an overview of the research design and methodology of this doctoral thesis as well as the demarcation of the study, assumptions, thesis layout and a diagrammatic representation of the research process followed.

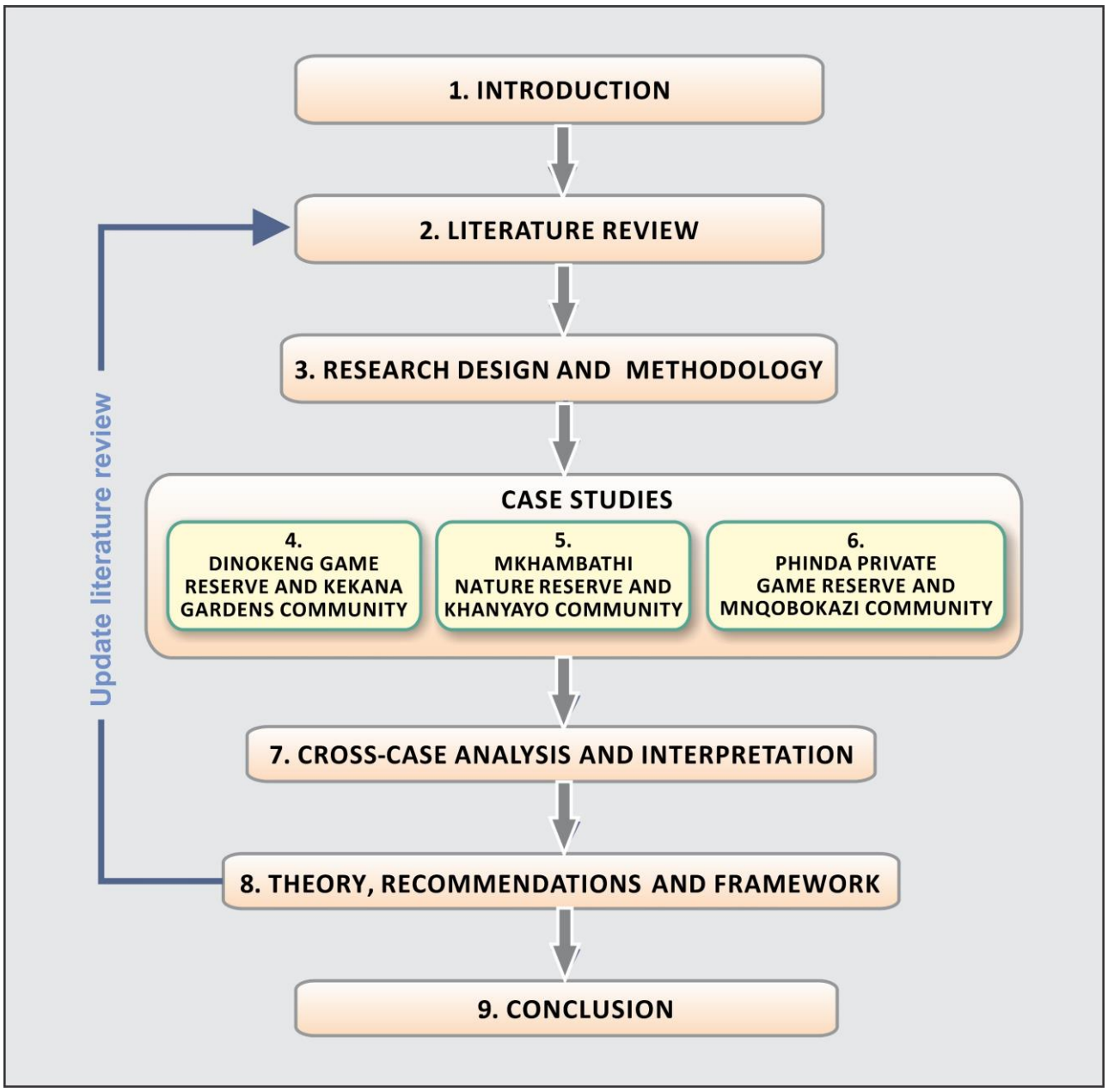


Figure 1.2: Thesis layout

**Chapter 2** reviews existing literature. In line with adapted grounded theory, the literature review is used to provide multiple lenses at the onset of the study and is then set aside. At the start, a conceptual framework of the literature is provided. The chapter first explains key concepts and then sets the context to the biodiversity and poverty crises, followed by an exploration of attempted solutions that involve communities and conservation. The review then turns to the phenomena that form the foci of the study and considers: the linkages between benefits, losses/costs and pro-conservation attitudes and behaviour; benefits (tangible and intangible); losses/costs; and other factors that may influence attitudes and behaviour. The review then contextualises the study approach by briefly considering seminal works in attitudinal and behavioural studies methodology; as well as comparing this research to related work in the field of environmental management/conservation and community involvement. Different schema are then introduced that attempt to explain the relationship between protected areas and local communities, as well as schema focusing on communities only. Once the write-up of results

from primary data was completed (after theory production in Chapter 8), the researcher examined more recent literature, which was then added to Chapter 2. This is done using a different font colour (blue), to be able to place the newer literature in its relevant section, yet still distinguish it from the original literature review (refer to blue arrow in Figure 1.2). The literature review chapter ends with a comprehensive diagrammatic summary that summarises the key phenomena emerging from the literature.

**Chapter 3** describes the research design and methodology chosen for this study, namely a comparative multiple-method qualitative approach using contrasting case studies and borrowing from grounded theory. The chapter begins with the overarching research approach, namely that it is a qualitative study; followed by discussion of the paradigms of constructivism/interpretivism and pragmatism that guided the research. The research design is then discussed, namely the use of contrasting multiple case studies and adapted grounded theory, consulting two constituencies and using multiple methods. In each case study, C1 and C2 are compared to each other, as well as comparisons being made between case studies. The variant of grounded theory research design results in a middle-range substantive theory being produced from the findings of the cross-case analysis. This theory leads to recommendations and a comprehensive integrated framework. Chapter 3 also explains how literature was used to provide a broad outlook for the study (a deductive strategy), but that via the construction of a theory, an inductive strategy was also utilised. The section on data collection considers the development of the research instrument, sampling and the specific data collection methods. Data analysis and interpretation leads the reader through the detailed process followed to generate findings, and the use of Atlas.ti. Chapter 3 then reflects on validity, reliability and generalisability, as well as ethical considerations. The chapter ends by providing an orientation to the case study chapters.

**Chapters 4, 5 and 6** are home to the three case studies, namely Dinokeng Game Reserve and the Kekana Gardens community; Mkhambathi Nature Reserve and the Khanyayo community; and Phinda Private Game Reserve and the Mnqobokazi community. These three chapters are structured in precisely the same way. They commence with a background to the case study, which considers the location and constitution of the protected area, tourist accommodation, the local community, and a brief history of the case study. Results and interpretation follow and are written up according to each question in the research instrument, with the exception of a brief cross-question analysis section towards the end. Each case study chapter ends with two summaries that present the key findings.

**Chapter 7**, the cross-case analysis and interpretation, makes use of the aforementioned summaries as well as bar graphs representing the combined results of all three cases, to develop meta-themes (primary research findings that constitute the most important issues emerging strongly from cross-case analysis). This chapter is written up according to research objectives, with each one ending in a list of meta-themes. After updating Chapter 2 with newer literature, the researcher returned to Chapter 7 to briefly compare the content of the literature review with these meta-themes.

**Chapter 8** uses the meta-themes derived from the cross-case analysis to construct a middle-range substantive theory in accordance with following a variant of grounded theory. Following the updating of Chapter 2 with more recent literature, the researcher returned to Chapter 8 to compare the theory with the schema in the literature review. The meta-themes are also used to compose recommendations for protected area managers and staff as well as for community members, which can assist in the implementation of the theory. The final step in the research process is that the theory constructed from primary data is integrated with pertinent concepts from Chapter 2 to develop a comprehensive integrated framework which represents the influences on pro-conservation attitudes and pro-conservation behaviour.

**Chapter 9** concludes the study by revisiting the achievement of the research objectives; the way in which the research gaps have been addressed or partially addressed; and the overall achievement of the research question and aim. This is followed by the key contributions of the research, shortcomings and limitations, and implications for future research.

## 1.8 Research process followed

Figure 1.3 can be used by the reader as a map to navigate through the study, and to return to after each chapter. It shows the chapters of the study and their connections, as well as how they relate to the research gaps and research objectives. This diagram also depicts the four layers of analysis and interpretation, as well as the four stages where primary research findings are compared with existing literature. As the study progresses, research objectives are addressed and increasing light is cast on the research gaps. Ultimately, this results in the bridging of the overarching research gap (see top semi-circle) and the achievement of the research aim and question (see bottom semi-circle).

Very briefly, Chapter 2 provides multiple lenses on the study territory, and Chapter 3 explains the research process which is summarised in this diagram. Within the three case study chapters, data from the two constituencies are compared. This is the first layer of analysis and interpretation. Each constituency is represented by a circle. Throughout the thesis, C1 is represented by green and C2 by the colour peach. The second layer of analysis and interpretation is presented in Chapter 7 where the three cases are compared, resulting in meta-themes. The latter are used to construct a middle-range substantive theory as well as recommendations for implementation thereof (layer 3 of analysis and interpretation). All three layers use primary data to build up knowledge on the influences on pro-conservation attitudes and behaviour and the relationship between C1 and C2, with a view to achieving both human-wellbeing and biodiversity conservation. The fourth and final layer of analysis and interpretation continues to build this knowledge, but this time integrating the theory from this study with existing literature to produce a comprehensive integrated framework. This is the final output in addressing the research objectives (and in so doing, the research question and aim). This in turn addresses the research gaps (and in so doing, the overarching research gap).

Literature specific to the nature reserves and adjacent communities that form the three case studies is not included in Chapter 2. This literature is found in the case study chapters (4, 5 and 6) and forms the first stage of comparison between primary findings and literature. Due to minimal literature in some of the case studies, this happens to a limited extent. In line with adapted grounded theory, the initial literature review in Chapter 2 was set aside months before data collection and not consulted again until after the theory in Chapter 8 had been constructed. Only then did the researcher return to Chapter 2 and update it with newer literature (blue arrow). After this was done, the researcher returned to Chapter 7 and compared the meta-themes to the literature in Chapter 2 (Stage 2); and returned to the theory in Chapter 8, to compare it with literature (Stage 3). The fourth stage of comparison to literature is different in the sense that primary research is now integrated with existing literature to produce the final framework.

## 1.9 Chapter 1 summary

Chapter 1 sets the scene for the thesis. The biodiversity and poverty crises demonstrate the need for this research, while the research gaps confirm that existing scholars have highlighted gaps in scholarly knowledge regarding how to achieve both biodiversity conservation as well as improvement of wellbeing for communities bordering protected areas. The research question, aim and objectives propose a way forward in addressing these gaps, while the research design and methodology explain the process followed. Finally, the demarcation and assumptions of the study are provided, followed by navigation tools in the form of the chapter layout and diagrammatic research process. The reader is encouraged to return to the latter throughout the thesis to aid navigation.

While these issues exist on a global scale, this research is focused on the South African context, but its findings can be of value in the wider African context, and indeed for protected areas and their surrounding communities globally.

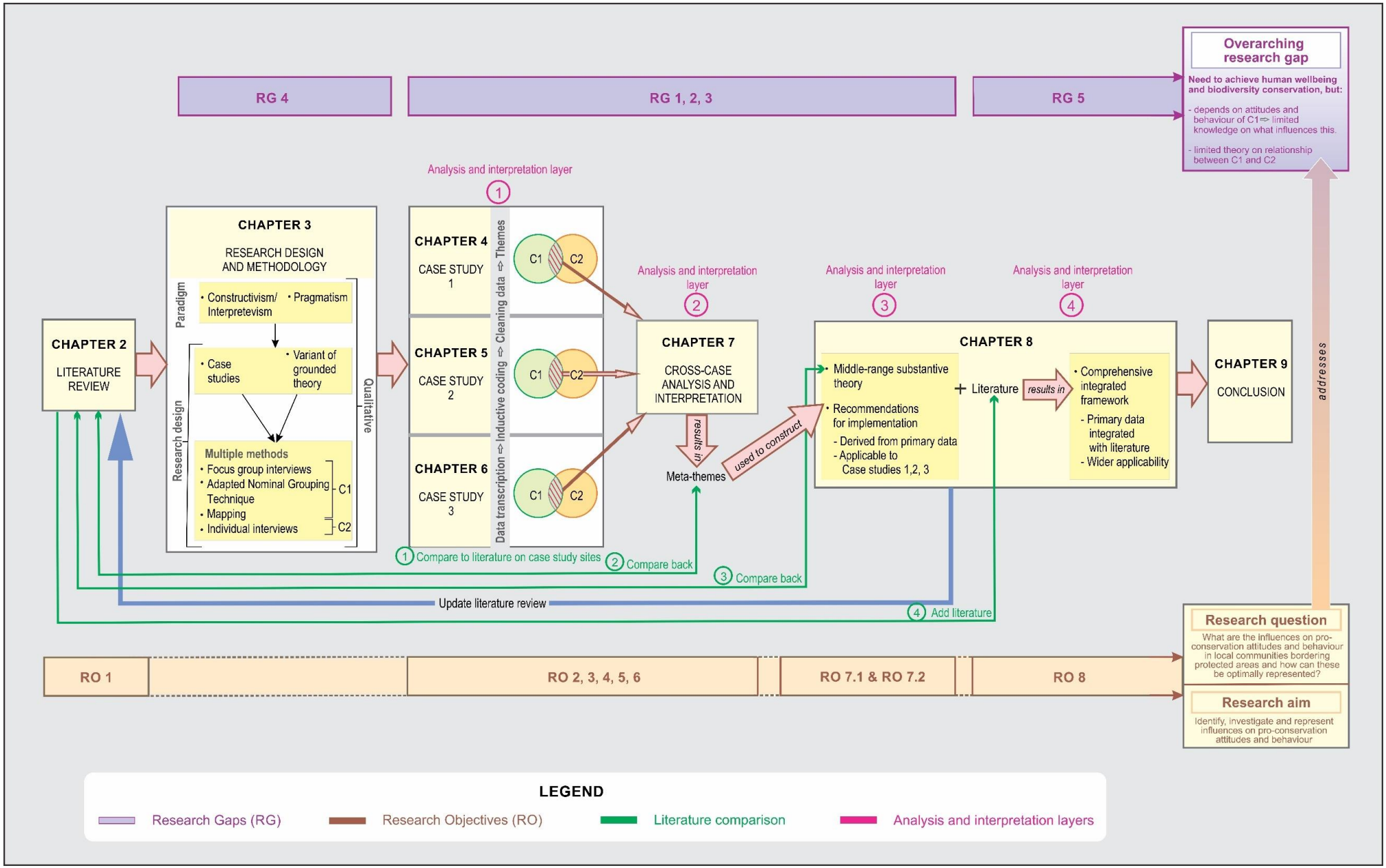


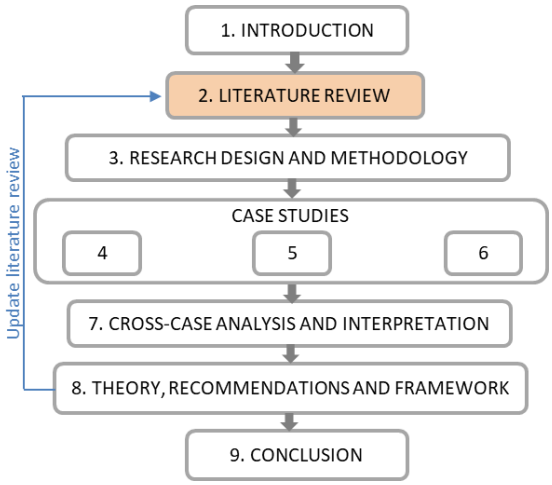

Figure 1.3: Research process

# Chapter 2

# Literature review

*"Asking whether community-based conservation works is the wrong question. Sometimes it does, sometimes it does not. Rather, it is more important to learn about the conditions under which it does or does not work".*

(Fikret Berkes, 2004:624)




## 2.1. Introduction

Chapter 2 is structured according to various topics which became apparent when reviewing literature. This research process uses a variant of grounded theory, which allows for a literature review for the purpose of providing multiple lenses (Thornberg & Charmaz, 2014). The initial review guided the development of the research gaps, question, aim and objectives, as well as the research instrument. This review was completed in January 2015, 11 months prior to commencement of the data collection. Once the research had been designed and the research instrument developed, the literature review was set aside. Over the next three and a half years the primary research was conducted and written up. On completion of this, in 2018, newer literature was consulted. To align with adapted grounded theory, it is essential to clarify which literature was used to provide multiple lenses at the onset of the study, and which literature was added at the end of the study. To achieve this, the newer research is **in a blue font** in order to clearly distinguish it from the original literature review. This pragmatic approach enables the more recent literature to be placed in appropriate sections, yet still differentiating it from the original literature review. In Chapters 7 and 8, both the original and newer literature are compared with the main findings of this research.

In writing a literature review, Maxwell (2013) warns against merely 'covering the field' and focusing only on studies particularly relevant to one's field. He argues for the inclusion of concepts from beyond the traditional field of study. This was achieved in this research study, drawing on a wide range of topics and sources from different fields. Due to the fact that many researchers in the field of social psychology use the traditional attitudinal and behavioural models and frameworks, the researcher consulted the seminal works of Fishbein and Ajzen (1975) and Ajzen (1985) among others. In the realm of pro-environmental behaviour, articles were consulted which explored seminal models and frameworks used to study pro-environmental behaviour in various contexts. These arise predominantly from the western world and concern topics such as pro-environmental behaviour in the workplace, in universities, in households, in a green electricity programme, and in encouraging sustainable energy usage. The

majority of sources consulted, related to the fields of protected areas/biodiversity conservation and local communities. Some sources were based purely on these domains, while others incorporated different combinations of the following topics: attitudes, behaviour, benefits, participation, poverty reduction and natural resource management. Some were from the perspective of a particular approach such as sustainable tourism development, ecotourism or one of the many community-based conservation/tourism approaches. Government Acts, books, news articles and an extensive range of academic journal articles were consulted from the fields of tourism, environment, development and social studies. In addition, articles covering work from all over the globe were included. For electronic sources, keyword searches as per the topics above were entered into different library databases (for journal articles), as well as Internet search engines such as Google (for topical news and information from government and other organisations).

Figure 2.1 presents the layout of Chapter 2. Its sections indicate the various themes emerging from the secondary data. The chapter begins by explaining key concepts that permeate the study. It then sets the context of the biodiversity and poverty crises and examines the solutions (approaches) that have been applied in attempts to address this. Most of Chapter 2 presents phenomena which emerged from the literature, which form the foci of this study, namely benefits, losses/costs, other factors, pro-conservation attitudes and pro-conservation behaviour. It first investigates the linkages between benefits and losses, pro-conservation attitudes and pro-conservation behaviour, before delving into specific benefits, losses and other factors that could influence pro-conservation attitudes and/or behaviours. The next part of the literature review contextualises the study approach by briefly touching on the seminal works for attitudinal and behavioural studies; after which it compares the work done in this doctoral research to other related work. In the next section, the researcher reviews existing schema (models and frameworks) that include both the community and the conservation area; as well as schema focused on the community only. The chapter ends with a literature review summary. This diagrammatic summary indicates various views, where views differ, and the research gaps.

In Chapter 1, the overarching research gap/problem was identified. In this chapter, the five individual research gaps/problems are presented. These are embedded within the relevant sections of Chapter 2, followed by the views represented in existing literature. In Chapter 9, the individual and overarching research gap/s are revisited in the light of this study.

Figure 2.2 presents the conceptual framework of Chapter 2 at the outset. It contains the researcher's map of the territory being studied at the time of the literature review.

Research Objective 1 is to review literature regarding the influences on pro-conservation attitudes and behaviour. Hence this chapter achieves this objective.

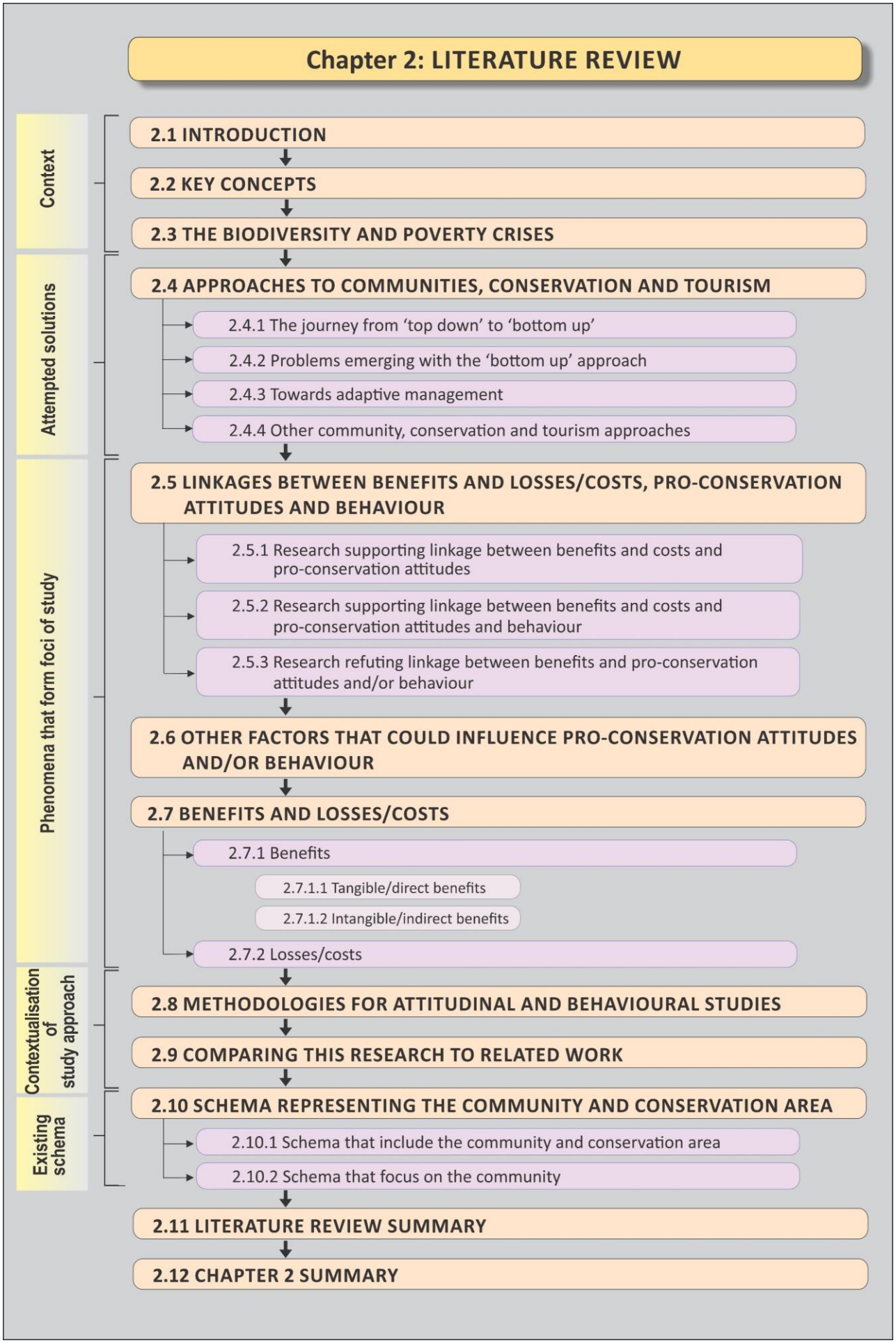



Figure 2.1: Chapter 2 layout

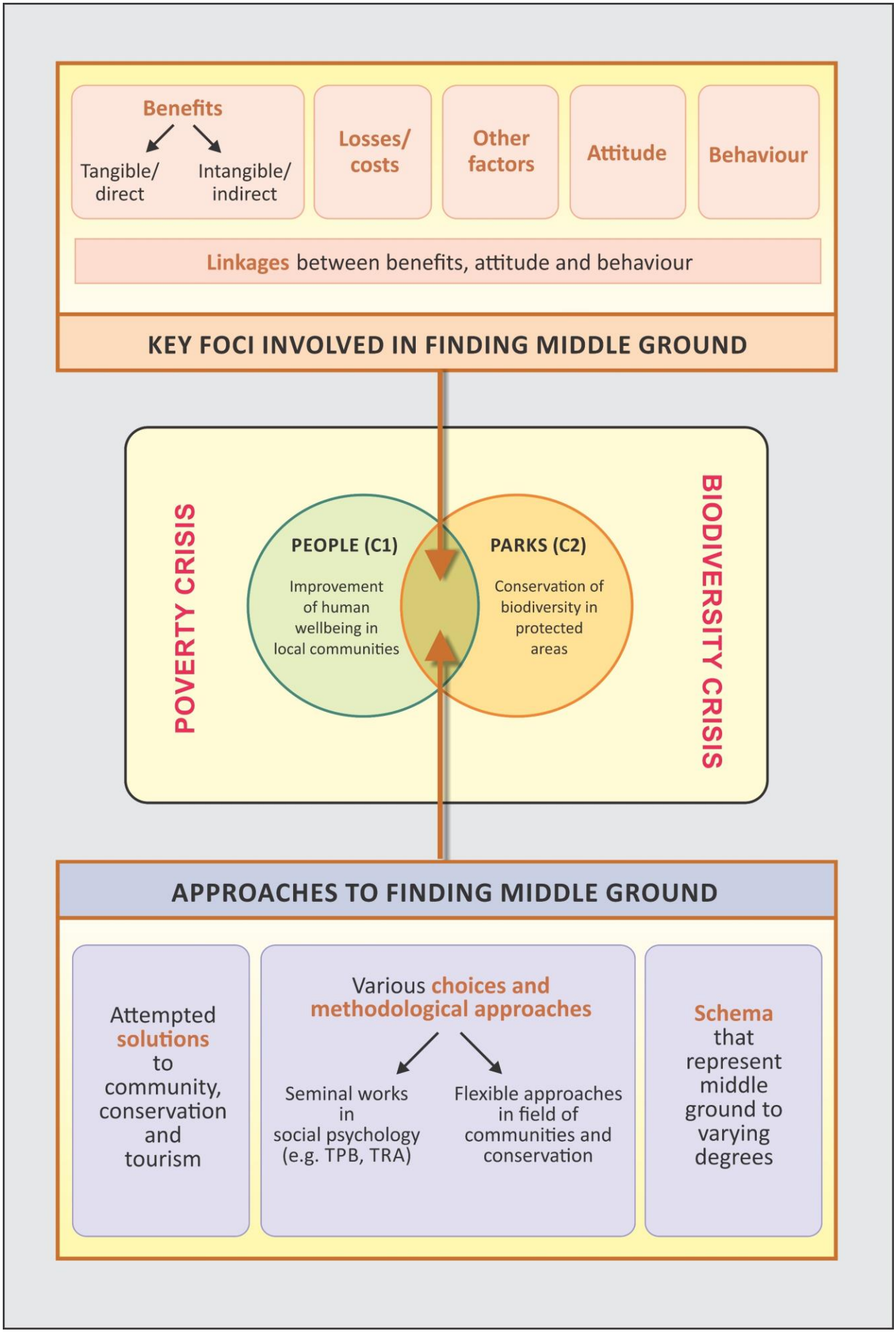



Figure 2.2: Literature conceptual framework

## 2.2 Key concepts

This section of the literature review presents and explains the key concepts relevant to the study.

### *(a) Benefits*

Benefits are described in ecotourism research as incentives for residents to protect the environment that tourists pay to visit (Ross & Wall, 1999; Bovarnick & Gupta, 2003). Driver (1996) defines a benefit as a desired condition, an improved condition or preventing an unwanted condition. Some benefits relate to use of natural resources, and in this context, the South African National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA) (South Africa, 2004:12) defines 'benefit' as "any benefit, whether commercial or not, arising from bioprospecting involving such resources, and includes both monetary and non-monetary returns". In the context of this research, benefit sharing (or benefit-based approaches) occur "when the protected area shares benefits with the local community for the purposes of improving their social and economic environment, and to foster a good relationship. Benefits can be tangible and intangible and include revenue sharing, access to natural resources, infrastructure development, sharing of information, collaboration, education and training initiatives, etc. The initiatives can come directly from the protected area or offered in collaboration with other organisations and government bodies" (Queiros & Mearns, 2019:2).

### *(b) Community*

Community is defined as a social group whose members live in a specific locality, share government and have a common historical and cultural heritage (Spenceley, Rylance, Nanabhay & van der Watt, 2016). In South African Government Acts, local community is defined as a group of people living or having rights or interests in a particular area (South Africa, 2003; South Africa, 2004).

### *(c) Losses/costs*

These are defined as the negative impacts incurred by the local community due to the presence of a conservation and tourism initiative. These can include reduced access or no access to protected area resources; human-wildlife conflict; negative impacts on traditional cultural structures; increased prices; over-dependency on tourism; and new forms of conflict (with park management, tourists and between locals). Other terms used are constraints or conservation-induced costs (Kideghesho, Røskaft & Kaltenborn, 2007), opportunity costs (Agrawal & Gupta, 2005) and downsides generated by protected areas (Pechacek, Li, Li, Wang, Wu & Xu, 2013).

### *(d) Other factors*

Snyman (2012a) states that benefit distribution is a necessary, but insufficient condition for communities to engage in pro-conservation behaviour. Therefore, to deepen understanding, this research sets out to identify other factors that could influence pro-conservation attitudes and behaviour. Several scholars

reflect on these other factors such as Gurung and Seeland (2011), Imran *et al.* (2014), and Matarrita-Cascante, Brennan & Luloff (2010). Examples include the presence of tourism, participation, multiple livelihood strategies and trust.

***(e) Pro-conservation attitudes and perceptions***

Attitudes are defined as "a state of mind of the individual toward a value" (Allport, 1966:24) or "an enduring predisposition towards a particular aspect of one's environment" (McDougall & Munro, 1987:87).

Bennett (2016:4) defines perceptions as "the way an individual observes, understands, interprets and evaluates a referent object, action, experience, individual, policy or outcome".

However, there is a close link between attitudes and perceptions. Getz (1994) touches on this, stating that some authors use the term 'perception' instead of attitude, and others are actually measuring perceptions when they say they are measuring attitudes. Getz (1994) explains that many researchers recognise three dimensions of attitudes: the cognitive (perceptions and beliefs); the affective (likes and dislikes); and behavioural (actions or expressed intent). If viewing it in this way, then cognitive attitudes *are* perceptions. Allendorf (2010) and Mutanga, Vengesayi, Muboko and Gandiwa (2015a) hold similar positions, commenting that attitudes of local communities can be described through the positive and negative perceptions they have regarding the protected area. Allendorf, Aung, Swe and Songer (2017), however, appear to use the two terms interchangeably. In the conservation sciences, the terms attitude and perception seem to be used in a rather fluid way. Hence in this chapter, the reader will come across both.

Most authors, though, suggest that perceptions influence attitudes. Attitudes are reinforced by perceptions and beliefs of reality, and are closely linked to values, which, unlike opinions, do not change quickly (Getz, 1994). Similarly, Vodouhê, Coulibaly, Adégbidi and Sinsin (2010) allude to previous studies which revealed that people's perceptions of protected area management strongly influenced their attitudes towards them. They conclude that perceptions influence attitudes. Allendorf, Aung and Songer (2012) and Infield and Namara's (2001) views resonate with this, that attitudes are partly formed by communities' and individuals' perceptions and experiences of the protected area; and that attitudes can be improved by building on positive perceptions and mitigating negative perceptions. Wang and Pfister (2008) similarly found that residents' perceptions of personal benefits from tourism were closely associated with their attitudes toward tourism in a positive direction. In the same vein, Sirivongs and Tsuchiya (2012) determined that perceptions are important in understanding attitudes. Furthermore, perceptions strongly affect local people's attitudes towards protected areas and their participation in protected area activities. Their study found that locals' positive perceptions affected their attitudes, while positive attitudes strongly influenced their participation.

Knowledge of community stakeholders' attitudes and perceptions towards the environment is important because it can help to: explain behaviour; aid understanding regarding the influences on attitudes and perceptions; improve outreach programmes and relationships with communities surrounding protected areas; develop effective benefit sharing programmes; reveal focus areas for education and training initiatives; assess the success of community conservation programmes, followed by necessary improvements; and determine ecological behaviour (Infield & Namara, 2001; Ogunbode, 2013; Snyman, 2014).

Most researchers interested in pro-conservation behaviour have measured attitudes towards the environment as an indicator of actual behaviour. Reasons for this are first, that it is easier to determine attitudes rather than actual behaviour, and second, researchers are concerned that local people may not be forthcoming regarding their actual behaviour, particularly if it is negative.

In this research, some perceptions will be discussed, but the outputs of the study focus on attitudes – the aspects of a community's environment (situation) that make them positive and that make them negative towards the protected area. As Sirivongs and Tsuchiya (2012) suggest, attitudes of local residents towards protected areas can be considered supportive, neutral or opposing in terms of the situations and problems. The present research focuses on these.

### *(f) Pro-conservation behaviour*

Attitudes are often linked to actual behaviour (Ogunbode, 2013), but some researchers question this link (Casaló & Escario, 2018). In the literature, pro-conservation behaviours are also referred to as pro-environmental behaviour, environmentally responsible behaviour, or custodianship or stewardship of the environment (Clark, Kotchen & Moore, 2003; Gadd, 2005; Imran *et al*., 2014). Pro-environmental behaviour is defined as behaviour that consciously seeks to minimise the negative impact of one's actions on the natural and built world, for example, not poaching and reducing waste production (Kollmuss & Agyeman, 2002). It refers to behaviour that harms the environment as little as possible and could even benefit the environment (Steg & Vlek, 2009). Bamberg and Möser (2007) state that it is a mixture of self-interest (for example, to do something that decreases health risk) and pro-social motives – concern for other people or species, the next generation or whole ecosystems (for example, preventing water pollution). Lucas, Brooks, Darnton and Jones (2008) note that changing behaviour is a complex matter which requires innovation and practical solutions across different sectors and at each level within a society.

### *(g) Protected areas*

The Convention on Biological Diversity (CBD) has developed 'The Strategic Plan for Biodiversity 2011-2020', which is a "framework for action by all countries and stakeholders to save biodiversity and enhance its benefits for people" (Convention on Biological Diversity, 2010). It sets out 20 targets, known

as Aichi Targets. Aichi Target 11 sets out to have at least 17 per cent of terrestrial and inland water areas and 10 per cent of coastal and marine areas, especially areas of biodiversity importance, under conservation by 2020 through a system of protected areas and other effective area-based conservation measures. Target 11 defines protected areas as "not only including strict protected areas but also protected areas that allow sustainable use consistent with the protection of species, habitats and ecosystem processes. In addition to protected areas, indigenous and local community conserved areas as well as private protected areas may be included in the total area provided the other conditions are met. Other effective area-based conservation measures may also include restrictions on activities that impact on biodiversity, which would allow for the safeguarding of sites in areas beyond national jurisdiction …" (Convention on Biological Diversity, 2012:1). The International Union for the Conservation of Nature (IUCN) defines protected areas as "a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (IUCN, 2018).

While the definition of protected areas, according to the 2014 amendment of the National Environmental Management Protected Areas Act (NEMPA) (South Africa, 2014) is narrower, and restricts protected areas to formally designated ones, the CBD and IUCN definitions allow for a more inclusive basket of land under conservation to be termed protected areas. As stated in the Department of Environmental Affairs' 'National Protected Area Expansion Strategy for South Africa, 2016' (NPAES), "Protected areas are areas of land or sea that are formally protected by law and managed mainly for biodiversity conservation. Only protected areas recognised in the NEMPA (Act 57 of 2003) are considered to be protected areas in the NPAES" (Department of Environmental Affairs, 2016:3). The document also reveals that the "NPAES uses a narrower definition of protected areas than the CBD and IUCN, which acknowledge the role of other effective area-based conservation measures in protecting biodiversity. These areas could include conservation areas that are areas of land not formally protected by law but informally protected by the current owners and users and managed at least partly for biodiversity conservation. They can also include a range of other mechanisms such as the intact and conservation zoned areas of the United Nations Educational, Scientific and Cultural Organization's (UNESCO) biospheres, buffer zones on world heritage sites, areas protected by spatial planning laws (for example, zoning for conservation use), areas protected by conservation servitudes, and in the marine context may include specially zoned fishery management areas" (Department of Environmental Affairs, 2016:3, 4).

Hence, drawing from the wider definitions of the CBD and IUCN, the three reserves studied in the present research can be considered as protected areas. The terms 'protected area' and 'reserve' are used interchangeably throughout, the latter being used during data collection as participants were more familiar with this term, as it is contained in the name of the protected area they live next to.

***(h) Relationship***

For a win-win situation to occur between parks and the people bordering them, biodiversity needs to be conserved and community wellbeing ensured (Davies *et al.*, 2014; Ferse *et al.,* 2010). This requires understanding of the people-parks relationship (Mutanga *et al.*, 2017) as well as attempts to improve these relationships (Stoll-Kleemann, 2005). There is, however, a shortage of literature in this regard (McCleave *et al.*, 2006; Thondhlana & Cundill, 2017).

This people-parks relationship forms a key component in the current research, as the researcher seeks to understand this relationship in the context of the three case studies; discover how it can be improved; and how best the various influences on it can be represented.

## 2.3 The biodiversity and poverty crises

The CBD defines biodiversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part" (Convention on Biological Diversity, 2014:n.p.). The present decline of biodiversity is a major concern because of the loss of species and the associated unknown impacts this will have on ecosystem functioning and human wellbeing (Davies *et al.,* 2014). The natural environment faces a variety of threats ranging from loss of forests and grasslands due to agro-fuel production, wildlife losing habitat and being consumed by hungry people, degradation of surface water and extraction of minerals and oil (Abrams *et al*., 2009; Beckline, Yujun, Etongo, Saeed & Mannan, 2018). Ceballos, Ehrlich, Barnosky, Garcia, Pringle and Palmer (2015) and Pimm, Jenkins, Abell, Brooks, Gittleman, Joppa, Raven, Roberts and Sexton (2014) paint a bleak picture. Using conservative assumptions, Ceballos *et al.* (2015:1) confidently conclude that there has been an "exceptionally rapid loss of biodiversity over the last centuries, indicating that a sixth mass extinction is already under way". They argue that this loss of biodiversity is the most serious aspect of the environmental crisis, and that a resultant devastating loss of ecosystem services will be experienced within the space of three human lifetimes. The crisis, however, can be averted through rapid intensified conservation efforts, but this is within a window of opportunity that is quickly closing. It will require alleviating pressures on the environment such as habitat loss, overexploitation and climate change – all of which are related to the size and growth of the human population (Ceballos *et al.*, 2015).

Focusing on Africa, its population is likely to double to 2.4 billion by 2050, according to a major study done by the United States Population Reference Bureau (Baker, 2015). It is estimated that by 2040, half the world's population under the age of 24 will be in Africa. According to a 2015 report from the African Development Bank, this group will also carry most of the unemployment burden (African Development Report, 2015). Baker (2015:44), writing for Time Magazine referred to 'Africa's demographic time bomb'. The next issue of Time featured a letter in response, which stated: "The African population explosion may well spell the end of Africa's magnificent nature and wildlife …" (Warnqvist, 2015:3). Abrams *et al*. (2009:800), writing about conservation policy in Africa, ask whether conserving the earth's natural

resources is compatible with humankinds' pursuit of economic growth and development. While approximately US$8-12 billion is spent annually worldwide on tackling biodiversity loss, this is insufficient to solve the crisis (Davies *et al.*, 2014). Various initiatives are underway to tackle this predicament, the most prominent being the CBD's 'Strategic Plan for Biodiversity 2011-2020'. Part of this has been the setting of Aichi Targets, which are aimed at global, national and regional levels. Parties are encouraged to aim for these, and adapt them to their national needs and priorities (Convention on Biological Diversity, 2010). South Africa is a signatory to the CBD.

Significantly reducing the rate of global biodiversity loss depends to a large degree on the management of protected areas (Stoll-Kleemann, 2005). These areas regularly have poor communities living in and around them who are dependent on tourism to the protected area and the natural resources of the protected area and/or surrounds, which heightens the challenge. At the recent World Economic Forum, the 'triple problem' of poverty, unemployment and inequality in South Africa was cited (World Economic Forum, 2019). In the third quarter of 2019, Statistics South Africa (Stats SA) revealed that unemployment had increased to 29.1% (Stats SA, 2019). The most recent Poverty Trends report by Stats SA shows a steady increase in poverty to 55.5% of the population, in contrast to 53.2% in 2011 (Lehohla, 2017:15). "In general, children (aged 17 years and younger), black Africans, females, people from rural areas, those living in the Eastern Cape and Limpopo, and those with little or no education are the main victims in the ongoing struggle against poverty" (Stats SA, 2017:n.p.). Adressing poverty remains a priority for the South Africa Government. Lehohla (2017:6) refers to the 'National Development Plan' and the 'Vision for 2030', which have two main objectives, namely the eradication of poverty and reduction of inequality. The success of this plan will be the extent to which the lives and opportunities of South Africa's poorest are sustainably transformed.

The dual crises of poverty and biodiversity loss are therefore two distinct but related global concerns in the 21st century (Davies *et al.*, 2014; Nyaupane & Poudel, 2011). This linkage has led to attempts to decrease poverty through management systems where the livelihoods of local communities are integrated into action plans, and they become involved in and support biodiversity conservation (Abrams *et al.*, 2009; Davies *et al.*, 2014; Stoll-Kleemann, 2005).

Within South Africa, the National Environmental Management Acts (NEMA) acknowledge the need for this linkage. The objectives of the NEMBA Act 10 of 2004 that are relevant to this study are to manage and conserve biodiversity; use indigenous biological resources sustainably; and to have fair and equitable benefit sharing relating to these (South Africa, 2004). Section 39 of NEMBA mentions a national biodiversity framework which should integrate a variety of stakeholders, including local communities (South Africa, 2004). The objectives of the NEMPA Act 57 of 2003 (South Africa, 2003) of relevance are: to effect a national system of protected areas to manage and conserve South Africa's biodiversity; to promote sustainable utilisation of protected areas for the benefit of people, while preserving their ecological character; and to promote participation of local communities in the

management of these areas, where appropriate. More recently, in March 2016, the 'Norms and Standards for the Management of Protected Areas in South Africa', linked to the NEMPA was released which provides more detail on linking poverty to biodiversity conservation (South Africa, 2016). In this document, the responsibilities placed on protected areas to improve human wellbeing are more obvious. Section 20 deals with enhancing the economic and socio-economic importance of the area through benefits where this is practical. Indicators include enhancing community welfare; effective communication; employment; community development through sustainable resource use; access to spiritual or religious sites; an active education and interpretation programme focusing mainly on local children; providing quantifiable long-term economic benefits; identifying the ecosystem services on which neighbouring land-users are dependent; maintaining and monitoring ecosystem services; and putting access agreements in place so that benefits can be derived from these services (South Africa, 2016).

With stakeholders within protected areas globally, as well as in Africa and South Africa, working towards greater involvement of adjacent local communities, and with government now actively advocating for this, the integration of these agendas proved to be more difficult and expensive than anticipated (Adams, 2013). This has led to mixed responses regarding the success of such involvement and integration, as discussed in the next section.

## 2.4 Approaches to communities, conservation and tourism

The development of effective strategies for creating community-centred incentives for conservation is of vital importance (Sachedina & Nelson, 2010). To understand the context from which the need for this study arose, it is important to grasp the shifts in community conservation approaches over the past few decades. Conservation has moved from focusing purely on preservation of the natural environment; to an approach that includes community wellbeing. More recently, the conservation landscape has shifted again to a 'new conservation debate' (McShane *et al.,* 2011) or 'new phase in biodiversity governance' (Stoll-Kleemann, 2005), in which the failings of participatory conservation are highlighted and questions raised regarding what really works for the betterment of the environment and communities surrounding protected areas. From this, a more flexible 'adaptive management' paradigm approach has emerged. This section briefly outlines this progression.

### 2.4.1 The journey from 'top-down' to 'bottom-up'

*"It has become difficult to imagine the word 'conservation' without 'community' sitting alongside it, as their combination is part of the international conservation and development lexicon".*

(Campbell, Haalboom & Trow, 2007:122)

Prior to the 1970s a top-down 'fences and fines' approach was followed, whereby biodiversity conservation received priority and surrounding communities were 'shut out', unable to access natural resources which were once theirs to utilise (Davies *et al.*, 2014). From the 1970s onwards, a more bottom-up, grass roots, participatory approach to managing protected areas was advocated, with communities and conservationists working together. Moreover, certain rights to the use of natural resources were awarded to local people (Davies *et al*., 2014; Stoll-Kleemann, 2005). There now appears to be wide consensus that local people need to have greater involvement in natural resource management, including within protected areas (Torquebiau & Taylor, 2009). These bottom-up approaches also aim to include communities in decision-making and benefit sharing to gain their cooperation and support for conservation (Snyman, 2014; Soliku & Schraml, 2018). They place emphasis on local peoples' abilities and the importance of tapping into local knowledge to make conservation empowering, culturally compatible and grassroots led. These shifts occurred due to failings of previous top-down approaches (Fraser, Dougill, Mabee, Reed & McAlpine, 2006). The resultant 'new' approaches are discussed in the sections that follow.

Hand-in-hand with the emergence of new approaches came a realisation that local indigenous communities naturally practise conservation, and that modern approaches can hinder this. However, not all agree, as is evidenced by Fennell's (2008) extensively cited article on the myth of indigenous stewardship. Fennell argues that traditional societies struggle to use resources sustainably, tending towards over-utilisation. Niedziałkowski, Komar, Pietrzyk-Kaszyńska, Olszańska and Grodzińska-Jurczak (2018), in their recent research on protected areas in Poland, also found a large group of conservationists who believed that local people have insufficient knowledge to be involved in managing protected areas and that their preoccupation with economic development threatens conservation. However, they argue that this belief is a barrier to local participation in conservation. Fennell's (2008) article has encouraged vigorous debate on the topic, such as Higgins-Desbiolles (2009), who synthesised the work of indigenous experts across the globe, and criticises Fennell's view, emerging strongly in favour of indigenous communities being able to increase sustainability. Abrams *et al.* (2009) writing from an African perspective; Wali *et al*., (2017) writing from a South American view; and Stoll-Kleemann (2005) sharing from an international perspective, concur. They argue respectively that revival of these practices is part of a true African Renaissance; can contribute to long-term management of protected areas; and can provide knowledge that is practical, experiential and localised, with great potential to positively influence biodiversity. In fact, Ferse *et al.* (2010) posit that more incorporation of traditional knowledge is needed, as well as increased communication between scientists, locals and managers (Berkes, 2004). Maritew Diaw, in personal communication in 2009 with Abrams *et al.* (2009) strongly urges the establishment of an African conservation identity, where local people living off the land are the ones who identify conservation priorities and where research programs are designed that are determined by, and compatible with, indigenous knowledge. This lively ongoing debate is evidence of a shift in paradigms as conservationists, communities and academics grapple to find solutions that truly work.

### 2.4.2 Problems emerging with the 'bottom-up' approach

Just like the 'fences and fines' approach drew criticism, the problems of this newer 'bottom-up' approach now feature in conservation literature. Several authors cite that win-win initiatives, benefiting both people and protected areas are the exception rather than the rule (McShane *et al.*, 2011; Shackleton *et al.*, 2010). Stoll-Kleemann's (2005) interviews with people working in protected areas revealed doubts as to the efficacy of the newer participatory approach. In another study amongst biosphere reserve managers worldwide, it was found that in general, these managers endorse inclusive conservation, but acknowledge critical hurdles in the implementation thereof (Stoll-Kleemann, De La Vega-Leinert & Schultz, 2010). The researchers state that "participatory conservation carries new dangers for effective biosphere reserve management, when the aspirations of communities and other stakeholders do not 'fit' with a predetermined interpretation of sustainable development" (Stoll-Kleemann *et al*., 2010:227). Berkes (2004), in his article on rethinking community-based conservation, writes that it is controversial because community development objectives are not always compatible with conservation objectives. Another article puts it this way: "... it is not just indigenous people or development specialists versus conservationists, but protection versus people and parks versus development" (McShane *et al.*, 2011:968). In more recent research, Collins (2016) writes about the Makuleke people, who, after a successful land claim, co-manage the land with SANParks[1]. He concurs regarding the conflict, alluding to tension between conservation officials and the community because certain conservation officials oppose all development as being negative for conservation, not realising that it is needed to generate benefits.

Some voices advocate a return to conservation via 'fences and fines', stating that parks are best protected by typical law enforcement measures such as patrols and physical borders (Licona *et al.*, 2011; Stoll-Kleemann, 2005). Infield and Namara (2001), who found that improved attitudes were present at the same time as illegal resource use, state that law enforcement must remain a central aspect of park management. "For conservationists, the bottom line for protected area management will remain conservation whereas communities will continue to pursue development objectives, even when these conflict with conservation" (Infield & Namara, 2001:57). There is a strong minority consisting mainly of ecologists who view hard-core law enforcement as the only successful way to protect biodiversity. They contend that biodiversity hotspots are threatened to such an extreme that experiments with communities and biodiversity should be done outside protected areas (McShane *et al*., 2011; Stoll-Kleemann, 2005). In the view of these ecologists, "… all attempts to reconcile resource use with conservation have always worked to the detriment of protected areas" (Stoll-Kleemann, 2005:29). Stoll-Kleemann (2005:30) then acknowledges both views, but urges for a solution: "The two sides of this awkward debate are polarized, both informed by institutional interests. The outcomes do not [advance]

1. SANParks is the commonly used name for the organisation, South African National Parks, which oversees the conservation of national parks in South Africa (Department of Environmental Affairs, 2019)

effective protected area management concepts and practice, and this strife is a sign of how urgently a pragmatic integration is needed".

The specific term or label for the approach is not critical in this research where the focus lies on the principles of the approaches. These have been extracted for inclusion in the literature review summary presented in diagram format at the end of this chapter. The approaches are discussed in the sections that follow.

### 2.4.3 Towards adaptive management

In the search to find answers to this awkward debate, a new approach has emerged under the umbrella term of 'adaptive management'. Berkes (2004) uses the term 'adaptive co-management'. It involves the sharing of management power and responsibility in a two-way partnership between community and government (Berkes, 2004). Sometimes, it is even more complex, involving multiple partnerships, on both the horizontal (across space) and vertical (across levels of organisation) dimensions. These parties may include a community, local groups, Non-Governmental Organisations (NGOs), government agencies and one or more international group/s (Torquebiau & Taylor, 2009).

This approach combines bottom-up and top-down management (Stoll-Kleemann, 2005:30) in a mix that depends on the situation, acknowledging that there is no 'one size fits all' solution (McShane *et al*., 2011). "There is no magic bullet, no formula that will apply everywhere, but creative solutions can sometimes (perhaps often) be found in each specific case" (Fisher, 2006:51). Adaptive management may also need to combine a mix of effective enforcement and participation/beneficiation (Stoll-Kleemann, 2005); and may well include more fences in future due to high population pressure, even though fences have high social, ecological and economic costs (Torquebiau & Taylor, 2009). In South Africa, in particular, the rhino poaching crisis has in many cases forced a return to former policies such as armed patrols; while at the same time making conservation success ever more dependent on cooperation with the local community to deter and catch poachers.

Adaptive management requires a high degree of mutual understanding between the manager and the user, recognition of diverse views, and willingness to follow a less-predictable road of collaborative management (Stoll-Kleemann, 2005). Infield and Namara (2001) refer to the need to perceive local people as potential partners, not perpetual poachers; while Ferse *et al*. (2010) state that local people are allies, not aliens. Infield and Namara (2001) bring in the balance by stating further that local communities must recognise wardens and rangers as neighbours with a job to do, and not simply as corrupt policemen.

Keywords in this approach are the design of consultative and participatory approaches that involve local people in planning and decision-making for conservation and sustainable tourism (Imran *et al*., 2014;

Stoll-Kleemann, 2005; Saufi *et al*., 2014). Monitoring must be balanced with negotiation and provision of options for local users of the environment, while simultaneously keeping them from destroying it (Stoll-Kleemann, 2005).

As mentioned above, there is no 'one size fits all' solution. In addition, there are no long-term solutions. Therefore, continual adaptation and experimentation is required. Strategies must be revisited as new knowledge comes to the fore and as the social, political, economic and ecological contexts change (Stoll-Kleemann, 2005). Each time, the new solutions should be tailored to that specific context *(*Ferse *et al.*, 2010; Sachedina & Nelson, 2010). A key feature of adaptive management is thus that it is an ongoing process of trial and error, learning together, communication and negotiation (Torquebiau & Taylor, 2009), which resonates with the 'new conservation debate' discussed above. This "ongoing, inclusive and regular communication between all stakeholders" is identified as a driver of success in Community-Based Tourism (Spenceley *et al*., 2016:13).

Finally, this section acknowledges the imperfection of adaptive management, the importance of recognising this and the need to continually seek new ways forward. McShane *et al.* (2011), for example, refer to win-win solutions being hard to achieve when balancing biodiversity conservation and human wellbeing. They advocate accepting the limitations of achieving these dual goals, making trade-offs and hard choices from the start, and being open about the losses and costs. In agreement, Torquebiau and Taylor (2009:2543, 2545) assert that "people-based conservation is the only realistic alternative for long-term management of natural resources, even if it sometimes fails" and that "the change in stewardship that [Community-Based Natural Resource Management] represents is so strong that a return to old, top-down, behind-the-fence-conservation is unthinkable". A case illustrating the volatility of co-management as a solution is that of research done in Colombia with local people from the protected areas. The research focused on co-management as a tool for conflict resolution (De Pourcq, Thomas, Arts, Vranckx, Léon-Sicard & Van Damme, 2015). The authors acknowledge that, despite initial high hopes, co-management is now perceived as falling short of expectations. However, they conclude by advocating continued co-management as the best option currently available, learning from, and implementing the recommendations that emerge from research.

Since this literature review was written, the highly contentious land issue in South Africa re-surfaced in 2018. President Cyril Ramaphosa announced support of a Constitutional Amendment that would allow for land expropriation without compensation (Mkhabela, 2018). It is unclear at this stage what the repercussions will be for game farms, nature reserves and protected areas under conservation. At present, South African law states that if land has been declared a conservation area, it must retain that status in perpetuity. Hence, if a community wins a land claim on such land, they have a few choices: they get the land rights; financial compensation; land in another area; or a combination of these three. However, getting land rights does not mean they can move back onto the land. They have no choice but to enter into a co-management agreement with the conservation agency, which will stipulate resource

access, power-sharing and benefit sharing. Unfortunately, this co-management is often plagued with problems such as further marginalisation of communities; ineffective or non-existent communication, participation and decision-making with communities; insufficient benefit sharing; lack of access rights; and slow implementation of co-management agreements (Bezerra, 2018; Thondhlana, Cundill & Kepe, 2016). Calfucura (2018:18), writing in the context of developing countries, opines that "land contestation plays a key role in the dynamics of relationship and conflict between the governments, corporate interests and the communities". With one third of protected areas in South Africa currently under land claims (Thondhlana *et al*., 2016), these challenges are particularly problematic.

The above acknowledgement of the challenges and uncertainty in adaptive management, emphasises the importance of this doctoral research – as it investigates and represents the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas, from the perspective of both the local communities and reserve staff. This is with a view to gaining insight into the dual achievement of biodiversity conservation and wellbeing of rural communities bordering protected areas.

While adaptive management appears to be the currently favoured approach, the next section deals with other approaches towards conservation and/or tourism that involve communities.

### 2.4.4 Other community conservation and tourism approaches

Some of the approaches towards living out the new paradigms have been employed for some time, enabling greater current understanding of their successes and failures. This section takes the reader through the main approaches attempting to reconcile conservation and development, namely Community-Based Conservation, Community-Based Natural Resource Management, Integrated Conservation Development Projects, Pro-Poor Conservation, Community Benefit Tourism Initiatives, Community-Based Tourism, and Community-Based Ecotourism (Kiss, 2004; Reimer & Walter, 2013; Tran & Walter, 2014). Some of these have a strong tourism focus, with tourism being one of the means of supporting communities and providing the motivation to conserve resources that tourists pay to visit. Previous sustainable tourism research has advocated Community-Based Tourism as a way of achieving sustainable practices, due to its ability to benefit local populations while decreasing certain negative impacts of tourism (Matarrita-Cascante *et al.*, 2010). This deduction is also encouraged because the goals of sustainable tourism and those of Community-Based Tourism are similar, with both focusing on social, economic and environmental goals.

#### *(a) Community-Based Conservation (CBC)*

Community-Based Conservation (CBC) is based on the idea that if conservation and development can be achieved simultaneously, then the interests of both can be served (Berkes, 2004:621). The rationale is that conservation success is affected by positive attitudes to conservation interventions, frequently

because of the benefits received. This should lead in turn to pro-conservation behaviours in the local community (Waylen, Fischer, McGowan, Thirgood & Milner-Gulland, 2010). CBC projects should by nature have the support of the community, high levels of local engagement and participation, market integration, benefit provision, and conservation education (Waylen *et al.*, 2010).

### *(b) Community-Based Natural Resource Management (CBNRM)*

Community-Based Natural Resource Management (CBNRM) is an approach to conservation that arose in the late 1980s (Mbaiwa & Stronza, 2010; Shackleton *et al.*, 2010). It aims to achieve conservation and rural economic development via local communities participating in natural resource management (Twyman, 2000), and has played a leading role in conservation strategies worldwide (Dressler, Buscher, Schoon, Brocingtom, Hayes, Kull, McCarthy & Shrestha, 2010). The underlying assumption is that once communities enjoy the use of natural resources and derive economic benefits from them, it will result in a sense of ownership and positive attitudes towards resource use, which in turn will cause communities to utilise their natural resources sustainably (Twyman, 2000). CBNRM has been extensively studied and critiqued with approximately half of the projects seemingly not meeting expectations, and the other half being proclaimed as successful (Shackleton *et al*., 2010).

### *(c) Integrated Conservation and Development Projects (ICDPs)*

Blomley *et al.* (2010), cited in Davies *et al*. (2014) refer to Integrated Conservation and Development Projects (ICDPs) as a broad term for projects practising a more people-friendly approach to conservation. Waylen *et al.* (2010) refer to ICDPs as a subset of Community-Based Conservation (CBC) interventions. However, with early results proving disappointing, the term fell out of favour and is less common today, but the dual goals of biodiversity conservation and poverty reduction are still being pursued under different names (Davies *et al.*, 2014).

### *(d) Pro-Poor Conservation*

Roe, Hutton, Elliott, Saruchera and Chitepo (2003) define pro-poor conservation as putting people first, with poverty reduction and livelihood security as core objectives. It seeks robust conservation approaches in which the voices and needs of poor people are central. It builds on the poor's priorities and capabilities; engages stakeholders to address relevant policy and the drivers of environmental damage; and empowers vulnerable groups via assets, rights and entitlements to improve their lives through sound environmental management (Hazlewood, Kulshrestha & McNeill, 2004).

### *(e) Community Benefit Tourism Initiatives (CBTIs)*

While other approaches stress local ownership and/or participation, Simpson (2008) has a different perspective when he writes about Community Benefit Tourism Initiatives. He suggests that the provision of livelihood and other benefits is most important, and one does not need significant community ownership or participation. CBTI proponents argue that community involvement often proves to be difficult, can create conflicts and jealousies, and can get in the way of distributing benefits fairly and

keeping expectations realistic. The community's involvement is required at some level with respect to advising on their needs and desires, but community ownership or control is not a fundamental requirement. Interaction between stakeholders, however, is vital, consisting of regular communication, engagement and commitment (Bertella & Romanelli, 2018; Simpson, 2008). Bertella and Romanelli (2018) further explain that CBTI often involves foreign NGOs as a stakeholder in the provision of benefits. However, Giampiccoli and Mtapuri (2012), in their literature review on Community-Based Tourism, present evidence of writers who disagree with Simpson, and feel that participation is important.

### *(f) Community-Based Tourism (CBT)*

Community-Based Tourism (CBT) refers to efforts that are planned, developed, controlled, managed and owned by local people (Giampiccoli, Jugmohan & Mtapuri, 2015; Lapeyre, 2010; Simmons, 1994). CBT projects have captured the attention of researchers due to their potential to benefit local people (Matarrita-Cascante *et al.*, 2010) because: rural communities capture most of the revenue (little leakage); tourism income generates significant linkages for local economies – supporting families and spending on local products; locals gain institutional and managerial capacity; and it empowers local people (Lapeyre, 2010). For CBT to prosper, however, Giampiccoli *et al.* (2015) suggest that it should complement other livelihood strategies, and not stand alone.

### *(g) Community-Based Ecotourism (CBET)*

There are numerous definitions of ecotourism, but in recent years near-consensus has been reached regarding the core criteria. Weaver and Lawton (2007) list these as follows: attractions should be mainly nature-based; visitor interactions should focus on learning or education; and the experience and product should be ecologically, socio-culturally and economically sustainable. One of the premises of ecotourism is that if communities benefit from the ecotourism venture, their livelihoods will be improved and they, in turn, will conserve natural resources and use the environment in a sustainable manner (Stronza & Gordillo, 2008).

Community-Based Ecotourism (CBET) is promoted as a community activity because of its economic benefits (Liu, Qu, Huang, Chen, Yue, Zhao & Liang, 2014), which can result in significant support for pro-environmental behaviour (Wunder, 2000). Due to the potential of CBET to resolve the contradiction between conservation imperatives and local rights to natural resources, it has been used in several ecotourism projects as the foundation framework (Reimer & Walter, 2013). CBET is increasingly recognised as a form of sustainable development that can promote local livelihoods, environmental conservation and culture (Tran & Walter, 2014), because it simultaneously provides for local economic benefits while maintaining ecosystem integrity. In theory, ecotourism can achieve this and is thus appealing as a conservation and development tool (Stem, Lassoie, Lee, Deshler & Schelhas, 2003). Ecotourism, particularly small-scale and locally owned, is an ideal means of creating opportunities to develop a diverse livelihood portfolio (Nyaupane & Poudel, 2011; Snyman, 2014).

This section has dealt with different approaches to community conservation and tourism, guiding the reader through the changes in conservation management from a top-down to bottom-up approach. Emerging from this history, adaptive management and other community conservation and tourism approaches have emerged as attempts to address challenges and seek better solutions regarding linking the community and conservation. Within most of these approaches, benefits play an important part.

With this as background, together with the context set in Sections 2.1, 2.2 and 2.3, the literature review now moves on to investigate the phenomena that form the foci of this study, namely benefits, losses/costs, other factors holding influence, pro-conservation attitudes and pro-conservation behaviour. These became apparent during the review of literature. First, the linkages between benefits and losses/costs and pro-conservation attitudes and behaviour are discussed.

## 2.5 Linkages between benefits and losses/costs, pro-conservation attitudes and behaviour

Finding successful middle ground between protected area biodiversity conservation and community wellbeing could be facilitated if community members think and act positively towards the natural environment. However, the **first research gap identified is the lack of consensus on the relationship between benefits, losses/costs, pro-conservation attitudes and pro-conservation behaviour.**

A global premise surrounding communities who live in/near protected areas with tourism/conservation initiatives is that if communities benefit from the venture, their livelihoods will be improved and they, in turn, will conserve natural resources and use the environment in a sustainable manner (Biodiversity Conservation Network, 1999; Kideghesho *et al*., 2007; Mbaiwa, 2005; Stronza & Gordillo, 2008). Yet despite these claims, there is disagreement on whether or not this occurs. Some argue that community-based approaches are failing to achieve the fundamental objectives of conservation and economic development (Berkes, 2004; Mbaiwa & Stronza, 2010).

Certain scholars support the linkage progression, that benefits received result in positive attitudes towards the environment (Liu *et al*., 2014; Reimer & Walter, 2013). This in turn can lead to pro-conservation behaviour (Hulme and Murphree, 1999; Tran & Walter, 2014). Others have proven that benefits result in positive attitudes, but do not conclusively lead to positive behaviour that conserves the natural environment (Emerton, 1999; Kiss, 2004; Rabinowitz, 1999; Snyman, 2014; Walpole & Goodwin, 2001). In some research, benefits have been shown to lead directly to pro-conservation behaviour (Liu *et al.*, 2014; Reimer & Walter, 2013; Stem *et al.*, 2003), while others found that benefits received do not even cause positive attitudes (such as Waylen *et al.*, 2010), let alone pro-conservation behaviour.

Snyman's (2012b) African research acknowledges the difficulty in measuring whether benefits do result in increased appreciation of biodiversity and actual conservation, while Coria and Calfucura (2012), who reviewed international studies, caution that the link between community development and biodiversity conservation is not a simple relationship. Perhaps this is why little research has been done that simultaneously investigates benefits and losses/costs received and incurred respectively, as well as pro-conservation attitudes and actual pro-conservation behaviour. Out of the articles which shaped this present study, only Stem *et al*. (2003) and Waylen, McGowan and Milner-Gulland (2009) had a focus on benefits, attitudes, and behaviour, but neither dealt with losses/costs.

To explore this research gap further, this section outlines previous research which supports or refutes aspects of the linkages between benefits, costs, attitudes and behaviour. It first looks at studies which have made the link between benefits/costs and attitudes; and then at those which have very specifically linked benefits/costs to behaviour and/or attitudes to behaviour. Finally, research that refutes linkages between benefits and pro-conservation attitudes and/or behaviour is considered.

### 2.5.1 Research supporting linkage between benefits and costs and pro-conservation attitudes

Several studies have examined the link between benefits received and attitudes towards the environment. Snyman (2012b) acknowledges the claim that receiving benefits from ecotourism can promote an appreciation of biological diversity and conservation in surrounding communities, but that this is difficult to measure. Scanlon and Kull (2009) found a clear link between benefits and attitudes amongst Torra residents in Namibia. Residents were aware of the potential benefits that wildlife conservation brought and how their own behaviour could impact this. Mehta and Heinen (2001) and Soliku and Schraml (2018) cite the growing empirical evidence that upholds the idea that local peoples' support for protected areas depends predominantly on their perceptions of the costs and benefits of living in or around these areas. In addition, unrealistic expectations can result in hostility towards the protected area or the body that failed to deliver the benefits (Gadd, 2005). In Mehta and Heinen's (2001) study on two CBC projects in Nepal, they found that peoples' generally positive attitudes were related to the real and perceived benefits of these projects. Similarly, in a study in Tanzania, Kideghesho *et al.* (2007) found that communities who received more wildlife-related benefits were more likely to support conservation efforts; while those who experienced more wildlife induced costs were less likely to support conservation. Also showing the link between benefits and positive attitudes and losses and negative attitudes is the work of Black (2015) in Rwanda and Botswana. Her results show that Rwandan residents received more social and economic benefits from tourism than the Batswana people, and as a result had more positive attitudes towards tourism and conservation than those in Botswana. In addition, in both countries, those who incurred costs from human-wildlife conflict expressed negative attitudes towards conservation and tourism. Infield and Namara's (2001) study in Uganda, showed that social development benefits improved attitudes towards the park, but not behaviour, with illegal grazing

continuing and park authorities receiving little support in controlling it. Furthermore, large mammals outside of the park have virtually been hunted out. These authors also point out that attitudes can be volatile and that, even when benefits are accrued, a single negative event (for example, bad behaviour by park staff) can sour relations for months or even years (Infield & Namara, 2001).

Shibia (2010) states that employment in ecotourism operations increases awareness in local communities of the importance of conservation. “Stable livelihoods around a protected area are the best pre-conditions for local acceptance of use restrictions inside the park” (Stoll-Kleemann, 2005:33). This involves creating alternative sources of income which can take on diverse forms ranging from improved access to tourism-related jobs to better cultivation techniques. It is a long-term task requiring high capacity and many resources (Stoll-Kleemann, 2005).

It is also important that communities are **aware** of benefits available and of the source of these benefits. Gadd (2005) and Snyman (2012b) highlight the importance of beneficiaries making the connection between the benefits and the wildlife resources from which those benefits stem. De Boer and Baquete (1998) found that awareness of benefits from conservation, along with education programmes encouraging sustainable use of natural resources via traditional conservation practices, can result in acceptance of restrictions on natural resource usage. Snyman (2012b) discovered that unless the respondent or family member of the respondent was employed in tourism, there was limited awareness of the direct tangible benefits of ecotourism and conservation. Outreach programmes, including education and social welfare programmes, are thus important to help local people link protected areas and tourism directly to benefits (Snyman, 2014). In their study on ecotourism in Nicaragua, De los Angeles Somarriba-Chang and Gunnarsdotter (2012) also found this to be important, asserting that locals should be made aware of the opportunities related to living around a protected area, and not just be informed of the regulatory limitations imposed on them because they live there. Another key determinant of the acceptability of conservation is the perceived fairness of the costs and benefits associated with it (Sommerville, Jones, Rahajaharison & Milner-Gulland, 2010).

In the discussion on specific benefits later in this chapter, more linkages are made between actual benefits and attitudes.

### 2.5.2 Research supporting linkage between benefits and costs and pro-conservation attitudes and behaviour

The following work makes the link to actual pro-conservation behaviour, either as a direct consequence of benefits, or as something that has resulted from positive attitudes.

Several studies link benefits to pro-conservation behaviour, but far fewer than those linking benefits to pro-conservation attitudes. Ogunbode (2013) cites several studies done in the western socio-cultural

context that strongly suggest **positive attitudes to be important antecedents of pro-environmental behaviour.** Dewu and Røskaft (2018:489) contend that community attitudes are "inherently linked to the long-term existence and effectiveness of protected areas". The Biodiversity Conservation Network (1999:1) suggests that "if local communities receive sufficient benefits from an enterprise that depends on biodiversity, then they will act to counter internal and external threats to that biodiversity". Mbaiwa (2005) concurs that it is essential for communities to receive tangible benefits so that they will have a vested interest in conserving the land and a reduced incentive to practise alternative land-uses that are more destructive to the environment such as agriculture, cattle farming and mining. For example, research on integrating the community into tiger conservation in northern India shows that the provision of developmental benefits to local communities (the Guijar people) outside and within tiger range, could assist in expanding tiger populations and maintaining their habitat (Harihar, Veríssimo & Macmillan, 2015).

Benefit-based approaches have therefore been widely adopted to reduce opposition and attract local support, based on the idea that benefits motivate local people to change their attitudes **and** to adapt their behaviour to be pro-conservation (Gadd, 2005; Kideghesho *et al.*, 2007). Kideghesho *et al.* (2007); Kiss (2004) and Shibia (2010) also claim that economic models that include benefits for local communities do promote an appreciation of biological diversity (attitudes) **and** conservation (custodianship). Scanlon and Kull (2009), in their research in the Torra Conservancy, Namibia found the same, but add that three conditions need to be met for successful progressions: firstly, benefits must be specific, equitable, appropriate and sufficient; secondly, local control must be allowed by devolving power and ownership of natural resources to the local level; and thirdly, there should be a conducive local context. In the case of the latter, it was conducive that the Torra community was small and wanted to conserve wildlife. They also had few other economic opportunities available to them.

In some cases it is a **lack of benefits or incurring losses/costs that causes negative attitudes which lead to negative behaviour.** Recent findings from research by Burgoyne and Mearns (2017) in the Ololosokwan village bordering the Serengeti National Park found that a perceived **lack of benefits** (particularly direct monetary benefits) coming from private tourism operations results in negative attitudes towards tourism. Many of the Maasai who feel that they were not seeing benefits, graze their cattle inside conservation areas. In a more extreme example, the Sicambeni community forcefully closed Silaka Nature Reserve in South Africa in April 2013, with one of the reasons being the reserve's failure to fulfill promises of benefits (Thondhlana *et al*., 2016). Hence, in both examples, a negative attitude relating to lack of benefits led to a behavioural action that is negative towards the environment. Odindi and Ayirebi's (2010) research involving communities around the Great Fish River Reserve in the Eastern Cape of South Africa, had a similar finding. The lack of sufficient benefits resulted in people seeing the reserve as a hindrance since they would prefer to use the land for more profitable activities such as crop and animal farming. The authors conclude that more benefits would assist in improving perceptions and result in ecological sustainability in the Great Fish River Reserve.

Similarly, it may not be a lack of benefits but **actual losses/costs** incurred by local communities that result in behaviour negative to the environment. For example, the research of Ghoddousi, Pintassilgo, Mendes, Ghoddousi and Sequeira (2018) in Golestan National Park (Iran) revealed that farmers suffer major losses from human-wildlife conflict. This results in a high rate of ungulate poaching, killing predators and using land inside the national park. The same occurs in the Chobe Enclave Community Trust. While this is a successful example in others ways (as highlighted in this chapter), human-wildlife conflict is rampant. The Chobe study does not look at attitudes, but provides an example of **losses which lead to negative behaviour**. Due to wildlife destroying crops and harming people/wildlife, there have been increased killings of 'problem animals' (Stone and Nyaupane, 2018). In an article in the SANParks Times, Rall (2016) cites Steve Collins, who is well known for his community and conservation work in South Africa, including the flagship Makuleke project. Collins concurs with the authors above, linking rewards from conservation to behaviour affecting the environment: "… until we are able to meaningfully include neighbouring communities into the wildlife economy so that they see concrete rewards from conservation, we will continually fight poaching and illegal wildlife trade using a 'fences and fines' approach" (Rall, 2016:18).

However, as Steg and Vlek (2009) imply, it is not a given that attitude leads to behaviour – they state that when behaviour is strongly related to attitudes, one can work on the attitude, and thus change behaviour. Casaló and Escario (2018) agree. Their study in Spain explicitly set out to test the relationship between attitudes and pro-environmental behaviour, and concluded that there is a positive association, but that it is dependent on the strength of the attitudes. Infield and Namara (2001) state that attitude studies are particularly useful where it is difficult to assess actual behaviour (for example, poaching and other illegal activities). In these cases, attitudes towards the environment are often used as indicators of actual behaviour.

Some authors **progress directly from benefits to pro-conservation behaviour**. Literature provides several examples of situations where economic benefits were linked to improved behaviour towards the environment. Stem *et al*. (2003), for example, found a positive correlation between tourism employment and the practice of conservation (custodianship). Stronza and Gordillo (2008) posit that ecotourism can be an incentive for conservation, especially if it triggers positive economic change. In their study, local leaders from Posada Amazonas (a joint venture between a private tour company and the local community of Infierno in Peru) expressed that increased concern for conservation had resulted in positive behavioural actions: "Now we are creating zones for conservation, thinking about future projects. We are also creating sanctions for people who break our zoning rules and hunt on trails near the lodge" (Stronza & Gordillo, 2008:458). In their study on two ecotourism destinations in China, Liu *et al*. (2014) also found that economic benefits have a direct impact on residents' pro-environmental behaviours. Reimer and Walter's (2013) study on CBET in Cambodia produced similar findings – because of the presence of the ecotourism project and the significant livelihood gains for the community, local

people are engaging in less logging and hunting and have a greater awareness of environmental issues. Finally, from newer research, Stone and Nyaupane's (2018) work in Chobe showed that benefits in the form of livelihood production via commercial utilisation of wildlife, sub-leasing of the conservation area, and employment in tourism establishments have resulted in decreased poaching.

Educational benefits could also play a role as suggested by Tran and Walter (2014). In investigating the participation of women in a CBET project in Vietnam, they found that some women in the project applied what they had learnt to change policies in the community, for example, lobbying for better waste management, which resulted in a cleaner community. A small number of women have used their new knowledge as a tool to promote control over community resources. Social benefits are also highlighted as resulting in pro-environmental behaviour (Stronza & Gordillo, 2008).

Mbaiwa and Stronza (2010) simplify the Sustainable Livelihoods Framework initially developed by Ian Scoones at the Institute for Development Studies (Krantz, 2001). This simplified model clearly shows how natural assets are benefits that generate outcomes such as wellbeing, income and reduced vulnerability. Of particular interest to this research is the feedback loop which demonstrates that local people receiving these benefits may reinvest in natural assets, which helps to ensure sustainability. The British Department for International Development (DFID) views a livelihood as being sustainable when it can cope with, and recover from, stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Krantz, 2001). However, Gadd (2005) warns that if the linkage between benefits and health of the environment is not emphasised strongly enough, beneficiaries may fail to protect the environment.

In the discussion on specific benefits, more linkages are made between actual benefits and behaviour.

### 2.5.3 Research refuting linkage between benefits and pro-conservation attitudes and/or behaviour

The following researchers **refute the links between benefits, attitudes and behaviour**. Walpole and Goodwin's (2001) study around Komodo National Park in Indonesia examined local attitudes towards protected area tourism and the effects of tourism benefits on local support for the park. Results indicated local support for conservation and a positive attitude towards tourism. Those who benefited from tourism were more likely to have positive attitudes towards tourism, but were not more likely to support conservation. This suggests that benefits and positive attitudes due to the presence of tourism might make no difference to local support for conservation. Hill, Byrne and Pickering (2015) concur. Their study on perceptions of rural residents living in El Vizcaino Biosphere Reserve, Mexico, showed widespread support for the designation of the reserve, knowledge of the importance of conservation, and positive perceptions regarding benefits emanating from reserve designation. Yet these positive perceptions did not translate into actions supporting conservation. The authors surmise that one needs

more than the provision of benefits, new skills and information. In this case, resistance to change and distrust of formal institutions associated with conservation would need to be overcome before pro-conservation behaviour is exhibited. Owens and Driffill (2008) and Snyman (2014) suggest similarly that positive attitudes towards the environment do not necessarily suggest that pro-conservation behaviour will result. Snyman attributes this to the fact that poor rural households face economic and time constraints that may prevent them from engaging in pro-conservation behaviour.

Infield and Namara (2001) also caution that attitudes are not always closely linked to behaviour. In their study in Uganda, for example, attitudes of local people had improved, but behaviours such as illegal grazing within the park continued at high levels (even though 60% of the park had been allocated for agriculture and pastoralism, and the community could access the conservation area for grazing and water during periods of drought and disease outbreaks). In the same vein, St John, Edwards-Jones and Jones (2010:661) highlight that "a person may have a positive attitude towards conservation, and yet still exhibit behaviours that contradict that attitude (for example, poach species that are of conservation concern). Several studies have collected data on attitudes towards a protected area or species and concluded that respondents held positive attitudes, yet either [did] not engage in pro-conservation behaviours, or continued to perform behaviours that have negative consequences [for] conservation goals …". In their study in the Grande Riviere village (Trinidad), Waylen *et al.* (2009) similarly found that while awareness of conservation and attitudes towards it improved (even among those not benefiting directly), this did not appear to result in pro-conservation behaviour. Even though over half of the respondents mention hunting as the biggest threat to wildlife, locals still hunted wildlife, not due to necessity but because it is a popular pastime and locals prefer it to meat from domestic animals. Finally, Heberlein (2012:583) is emphatic that attitudes have very little to do with behaviour.

The illustrations in the preceding discussion point to good attitudes which do not necessarily lead to good behaviour. In this context, Owens and Driffill (2008:4412) add to the complexity of these linkages, cautioning that, through the provision of incentives, behaviour can be changed **without** an explicit change in attitudes.

Bookbinder, Dinerstein, Rijal, Cauley and Rajouria (1998) point to ecotourism not generating enough support to provide **sufficient** incentives for local people to conserve. It could also be that benefits are frequently too short-lived, rather than ongoing, to truly encourage conservation amongst local communities and to fundamentally change social and cultural patterns of resource use (Kiss, 2004; Pretty & Smith, 2004).

Even if benefits are sufficient, Kiss (2004) **refutes the link between benefits and behaviour**, concluding that the economic benefits of ecotourism do not necessarily result in local people supporting conservation or taking relevant action; while Snyman (2012a) notes that although benefit distribution is necessary, it is not enough to encourage communities to engage in pro-conservation behaviour.

**Refuting the link between benefits and attitude**, Snyman's (2012a) study on the Torra Conservancy did not find a difference in attitudes towards the importance of conservation, between those employed in ecotourism and those who were not.

To sum up, Section 2.5 outlined the differing research results regarding the linkages between benefits/costs and pro-conservation attitudes and pro-conservation behaviour. There are several schools of thought regarding these linkages. Section 2.5.1 discussed links between benefits and pro-conservation attitudes and losses/costs and negative attitudes. Section 2.5.2 dealt with various views, namely, that positive attitudes lead to pro-environmental behaviour; lack of benefits or incurring losses/costs cause negative attitudes which lead to negative behaviour; or the direct progression from benefits to pro-conservation behaviour. Finally, Section 2.5.3 refutes the above linkages, disagreeing respectively that links exist between attitudes and behaviour; benefits and behaviour; and benefits and attitude.

## 2.6 Other factors that could influence pro-conservation attitudes and/or behaviour

This section contains other factors identified in literature that may influence the attitudes and behaviour of local communities towards conservation. While they are not benefits or losses per se, cognisance should be taken of them. Several studies highlighted that further factors (apart from benefits and losses) may influence pro-conservation attitudes and/or behaviour of local communities. The findings from these studies are outlined below:

***(a) Participation***

Before delving into the specifics of beneficiation, one should first attempt to explain participation, a term used interchangeably with involvement. It is addressed sufficiently to affirm its **importance and close connection to concepts relevant to this study**. In terms of ecotourism, Garrod (2003) argues that local participation is pivotal, and that without it, ecotourism cannot be termed ecotourism, but simply nature-based tourism. In fact, in most community conservation and tourism approaches, participation of local communities in tourism is essential and appears to be closely linked to the derivation of livelihood and other benefits from the tourism initiative (Simpson, 2008; Wali *et al*., 2017). The NEMPA Act also acknowledges its importance, with one of the objectives being to promote the participation of local communities in managing protected areas, where appropriate (South Africa, 2003). More recently, in March 2016, the 'Norms and Standards for the Management of Protected Areas in South Africa', linked to the NEMPA Act, was released, in which Section 10 provides more detail on participation than the original act. In the context of sound relations between protected areas and neighbours, it mentions indicators such as having programmes in place which encourage good relations, regular interaction, collaboration, opportunities for neighbours to provide input, and the entering into co-management agreements where relevant (South Africa, 2016). Other recent documentation by the Department of

Tourism identifies high levels of participation and decision-making as a driver of success in CBT. However, a barrier can occur when participation is dominated by the powerful, and local people do not know who the other stakeholders are (Spenceley *et al*., 2016). Both worldwide and in the South African context, participation thus appears to be key.

In the context of sustainable tourism development, Saufi, O'Brien and Wilkins (2014:803) define community participation as "tourism activities operated by the local community with the retention of economic benefits locally, and the accrual of favourable social outcomes such as tourism-related education and training". This suggests that **communities participate in accruing benefits**. Stem *et al.* (2003) appear to confirm this, except that they place more emphasis on indirect benefits, and their link to conservation. They state that income generation alone is insufficient to ensure conservation, and that pro-conservation behaviours are more associated with **participation in** indirect tourism benefits, particularly training and the exchange of ideas.

A further link suggests that **those who participate get *more* benefits.** Scanlon and Kull's (2009) study found that Torra residents in Namibia believed that those who participated in tourism saw more direct and indirect benefits than those who did not participate. Scanlon and Kull suggest that this **could predispose them to have more positive attitudes towards conservation**.

The research results of Agrawal and Gupta (2005) suggest that **the more benefits, the higher the likelihood of participation.** Their study in Nepal revealed that the more benefits accruing to households, the more the likelihood of participation increased. They also stress that to explain participation, one must understand benefits and costs, as well as the economic and social variables of a household. The study by Ward, Holmes and Stringer (2018) in Madagascar concurs – locals were more likely to participate if two important benefits were received, namely protection of the forest and easier access to forest resources.

Another premise is that **participation itself is a benefit.** Participation in decision-making, ownership and management is viewed by some as an important benefit **which builds social capital** (such as leadership skills, building local institutions, new learning and greater local cohesion) and **which results in conservation by communities** (Doyle-Capitman, Decker & Jacobson, 2018; Stronza & Gordillo, 2008). The latter state further that "an increasing number of scholars are hypothesising that ecotourism's real connection to conservation comes through participation in ownership and management rather than through economic benefits alone" (Stronza & Gordillo, 2008:451).

Certain other authors too, suggest that **participation increases support for conservation.** Stoll-Kleemann *et al.* (2010) state that participation has a positive effect on the likelihood of successful conservation-development integration. They found that including communities in one additional implementation process increased the likelihood of the project being successful by a factor of 1.4. Their

study was from the perspective of the managers of biosphere reserves, and results indicate that the two most positive results of participation were improved conservation success and improved social acceptance (Stoll-Kleemann *et al*., 2010). Similarly, in research done with local people bordering or living in protected areas in Colombia, effective participation was found to be a decisive factor in reducing conflict and improving co-management (De Pourcq *et al.*, 2015). In Liu *et al*. (2014), in their study of two ecotourism destinations in China, and in the research by Matarrita-Cascante *et al*. (2010) on sustainable tourism in Costa Rica, it was found that participation resulted in an increase in residents' pro-environmental behaviour/environmentally sustainable practices. Wyman and Stein (2010), in their study on CBC in Belize, take it a step further, finding that **participation in conservation initiatives** (whether financially successful or not) **was linked to higher conservation values *and* perceived community benefits.** Participation is thus a strong basis for conservation.

In recent research, Masud, Aldakhil, Nassani and Azam (2017) turn this around, suggesting that **environmental and conservation knowledge positively influences participation**. In their study of marine protected areas in Malaysia, they suggest that knowledge and appreciation of the environment facilitates local participation in ecotourism.

On the other hand, **negativity towards conservation can be caused if locals are denied the opportunity to participate or do not receive benefits**. Zhang, Luo, Mallon, Li and Jiang (2017) who studied conservation success in China's protected areas, concluded that **lack of participation resulted in negative attitudes towards conservation.** Mbaiwa and Stronza (2010) found that some respondents who were negative towards CBNRM, were those who had committed offenses (such as illegal hunting) and were thus denied participation or could not receive benefits. Further examples of a perceived lack of benefits resulting in negative attitudes were provided in Section 2.5.2.

**Participation also strengthens a community.** Matarrita-Cascante *et al.* (2010) found that participation contributed to 'community agency' (also termed community unity or empowerment), which is created by relationships, interaction and communication. Community agency, in turn, increases the adaptive capacity of a community, which impacts on attitudes and behaviour.

Considering all the authors mentioned above, most agree that **participation *and* benefits are needed** (the latter are discussed later in this chapter)**.** For example, as discussed above, CBC projects should, among other aspects, have high levels of local engagement and participation as well as benefit provision (Waylen *et al.*, 2010). In fact, most of the approaches to community conservation and tourism discussed in Sections 2.4.3 and 2.4.4 involve participation. However, there are contrasting views, but these are in the minority. For example, Simpson (2008), an advocate for CBTI, suggests that the provision of livelihood and other benefits is what matters the most and one does not need significant community ownership or participation.

***(b) Positive perceptions about protected areas***

Bennett, Di Franco, Calò, Nethery, Niccolini, Milazzo and Guidetti (2019) found that positive perceptions were associated with greater support of protected areas. Jhala, Pokheral and Subedi (2019), in their research into community wellbeing and conservation awareness in Chitwan National Park, Nepal, suggested that, in a bid to improve positive perceptions, it would be advantageous to park management if they ran awareness campaigns for the local communities that focused on linking benefits to the existence of the protected area. Allendorf, Swe, Oo, Htut, Aung, Aung, Allendorf, Hayek, Leimgruber and Wemmer (2006), who studied protected areas in Myanmar, found that having positive perceptions regarding protected areas had a far greater effect on attitudes than socio-economic variables did.

***(c) Responsibility towards the protected area***

Kollmuss and Agyeman's (2002) article outlines key models which try to explain pro-environmental behaviour **in general**. Out of these, only two mention responsibility or 'locus of control'. The idea is that people with a greater sense of responsibility are more likely to practise pro-environmental behaviour, whereas if an individual feels he/she cannot influence the situation, or should not have to take responsibility, he/she is less likely to practise this behaviour.

Focusing on **pro-conservation behaviour in the specific context of rural communities and protected areas**, a mere two references were found. Both sources link conservation success to **responsibility in management** of the protected area. Nsabimana and Spencer (2013) mention that the unwillingness of authorities to devolve ownership management responsibility to local rural communities is one of the reasons for the failure of CBC programmes. Rodríguez-Izquierdo, Gavin and Macedo-Bravo (2010) studied barriers and triggers to community participation in the Cordillera Azul National Park in Peru and found that rural communities felt that, to some extent, park management was their responsibility. This appeared to contribute to the success of community conservation initiatives.

Only one source, which appeared in the second review of literature, refers to **responsibility towards the environment**. "A strong sense of ownership and custodianship within the community" is identified as a driver of success within CBT, which enhances the protection of tourism resources (Spenceley *et al.,* 2016:12).

***(d) Demographic factors***

Various demographic factors can play a role in impacting conservation behaviour. These include the ages within a family and age of respondent, income, family size, education level, social welfare, living standards, employment patterns, household income and sources of income (Allendorf *et al.*, 2006; Bennett *et al.*, 2019; Dewu & Røskaft, 2018; Mutanga, Vengesayi, Gandiwa & Muboko, 2015b; Snyman, 2014). Some demographic factors can be benefits, for example, if employment or a source of income results from the tourism or conservation initiative, then it is a benefit. This link is therefore outlined

under the section on benefits. Regarding level of income, the higher the level of household income, the more individuals deemed conservation as important (possibly because they were in the situation of not being entirely dependent on proximate natural resources for survival) (Snyman, 2012b); and they also had better attitudes and perceptions towards conservation (Rahman, Mahmud and Shahidullah, 2017).

Education and its influence on pro-conservation attitudes receives much attention in the literature. Kideghesho *et al*. (2007), Mehta and Heinen (2001), Mutanga *et al*. (2015b), Shibia (2010), Snyman (2012b) and Stem *et al*. (2003) all found that higher levels of education were notably linked to greater acknowledgement of the importance of conservation and/or more favourable attitudes towards conservation, and had the greatest impact. Research by Rahman *et al.* (2017) on a Bangladeshi protected area and the community involved in co-management thereof, found that not only do the more educated support conservation, but they are also less-dependent on natural resources. Even in nationally representative surveys, for example, in Spain and Thailand respectively, education level is shown to be closely related to pro-environmental behaviours (Casaló & Escario, 2018; Chankrajang & Muttarak, 2017). On the other hand, De Boer and Baquete's (1998) study in Mozambique and Gadd's study in Kenya (Gadd, 2005) did not find a correlation between education level and attitudes towards the protected area. Another cautionary note comes from Heberlein (2012), who warns that it is difficult to change attitudes through education, and much harder still to influence behaviour.

Mutanga *et al.* (2015b) found that age and positive conservation perceptions are significantly correlated; while Casaló and Escario (2018) report a significant association between age and actual pro-environmental behaviour.

While this study does not consider demographics, it is worthwhile to acknowledge these relationships, as they have relevance to the integrated framework generated at the end of this thesis.

***(e) Multiple livelihood strategies***

While some sources of livelihood are directly related to the tourism and/or conservation initiative, others may be independent of it, and hence not a benefit accrued from the protected area *per se*. Regardless of the source of the livelihood, multiple livelihood strategies are wise since they help to avoid exclusive dependence on natural resources for survival (Gurung & Seeland, 2011; Rahman *et al.,* 2017; Snyman, 2014) and improve local peoples' living standards. This is important for long-term conservation success, because providing benefits to local people will not deter them from illegal activities if they cannot meet their daily survival needs. Since protected areas can often only contribute minimally to livelihood, other sources need to be found (Kideghesho *et al*., 2007) that are environmentally-sustainable (Ferse *et al.,* 2010). A diverse livelihood portfolio could include small-scale locally owned tourism businesses (Nyaupane & Poudel, 2011; Snyman, 2014) and other non-tourism-related SMMEs; better access to tourism-related jobs; better cultivation techniques (Stoll-Kleemann, 2005), amongst others.

***(f) The presence of tourism and using tourism to its full potential***

Based on their study at La Fortuna, Costa Rica, Matarrita-Cascante *et al*. (2010) suggest that the presence of tourism plays a role in encouraging environmental consciousness due to the realisation that nature brings tourism. Once locals recognised the link between a healthy natural environment and tourists coming to enjoy it, it resulted in a growth in local organisations created to protect natural resources. These included a water treatment plant, and environmental education and recycling programmes in local schools. Similarly, Gadd (2005) reported that elephants in the Laikipia District, Kenya, were valued by locals because of tourism and the resultant benefits.

When tourism is introduced, it is important to be realistic regarding what local people may expect (Spenceley, 2008). In recent documentation released by the Department of Tourism, realistic expectations of timeframes, returns and the challenges of tourism are mentioned as a driver of success in CBT (Spenceley *et al*., 2016). Collins (2016) also points out that realistic expectations should be set out at the start.

***(g) Demeanour and intentions of park staff***

In Infield and Namara's (2001:55) study, senior park staff stated that "the most important element of the [conservation] programme[s] had been the demonstration that park authorities were genuinely committed to developing a more positive way of relating to local communities". Furthermore, communities who had experienced the above-mentioned community conservation programmes generally held more positive attitudes towards the park, and were more willing to see it remain as a conservation area than those who had not experienced the programmes.

***(h) Time and trust***

It takes time to see success in CBC initiatives and to build relationships of trust and reciprocity (Ferse *et al*., 2010). Moreover, lack of trust often prevents people from implementing pro-conservation behaviour because they are suspicious of stakeholders (Kollmuss & Agyeman, 2002). Recent research by De Pourcq *et al.* (2015) with Colombian locals living in or near protected areas revealed trust (and participation) to be the most decisive factors in lowering conflict and improving effective co-management. The authors therefore propose that trust and participation be priority tasks for government and protected area management who are trying to mitigate conflict on a tight budget. The importance of trust also emerged in the work of: Tolkach and King (2015) in the Democratic Republic of Timor-Leste, near Darwin, Australia; in Bennett *et al.*, (2019) among fishermen operating in Marine Protected Areas in the Mediterranean Sea; and in Paudyal, Thapa, Neupane and Birendra (2018) in the Gaurishankar Conservation Area Project, Nepal. Trustworthiness takes time, but can be earned by ongoing sharing of conservation-related benefits and improving local quality of life through development and infrastructure. This is demonstrated by &Beyond at Klein's Camp in Ololosokwan village (Tanzania), where it took several years before the community recognized &Beyond as a trustworthy partner (Burgoyne & Mearns, 2017). Similarly, with the Chobe Enclave Conservation Trust, two years were spent

consulting with and mobilising the community before tourism activities and community wildlife management could commence. Mutual trust had to be built first, which today has resulted in lower rates of poaching in the communities involved with the trust (Stone & Nyaupane, 2018). Unfortunately, as contended by Ferse *et al*. (2010:3), sometimes "the time needed for conservation measures to bear fruit may exceed the time local communities are willing or able to wait for visible results".

***(i) Giving jobs to outsiders***

Employing outsiders can influence pro-conservation attitudes **negatively**. In Saufi *et al's.* (2014) study on community perceptions of tourism development in Lombok, Indonesia, some participants commented on employment inequities, voicing dissatisfaction that outsiders were employed more often than locals. The same was found by Mutanga *et al.* (2017) in research on four protected areas in Zimbabwe; and by Thondhlana *et al*. (2016) regarding Silaka Nature Reserve, South Africa. Lack of preferential employment for locals was a cause of negativity in communities surrounding the Great Fish River Reserve, South Africa (Odindi & Ayirebi, 2010); and a source of conflict according to data collected in 13 nature reserves in South Africa (Thondhlana & Cundill, 2017).

***(j) Exclusion of local symbols***

When local tradition, style and architecture is not incorporated into tourism infrastructure, it can negatively influence attitudes. Saufi *et al*. (2014:815), for example, found that excluding cultural symbols in Indonesia "was perceived as dismissive of local identity and negatively influenced host community identification with tourism". Lee, Matarrita-Cascante, Xu and Schuett (2018) found the same in their study of American national parks and Native Americans, where the latter felt their history, identity and values had not been considered, respected or represented. This resulted in conflict, making it difficult to collaborate. They conclude that these intangible factors, and embracing the values of each stakeholder should be at the forefront of park management.

***(k) Listening to local voices and providing choices regarding benefits***

Wali *et al.* (2017) caution against assuming that all communities need the same benefits, and advocate for listening to local voices, and engaging with the people to determine their distinct needs. Furthermore, providing choices regarding benefits could be an important factor in encouraging communities to support conservation. Research on tiger conservation among the Guijar people in northern India revealed that merely providing benefits can result in communities perceiving themselves as outside recipients of aid who are alienated from conservation objectives, rather than being partners (Harihar *et al*., 2015). These authors hypothesised that the provision of choice to communities could instil a sense of partnership. They therefore investigated how the Guijar felt about two different choices, with each one containing sub-choices. These were: 1) continued coexistence with tigers (but with additional options of providing feed for livestock, access to education, building structures to guard livestock and providing veterinary care); versus 2) resettlement (with further choices of different land

sizes, property right options, housing structures and livelihood options). Harihar *et al*. (2015) conclude that social and development goals and benefits should be guided by the preferences of the community **but** also linked to conservation goals, because doing so results in the design of "sustainable socio-ecological systems that benefit both tigers and people" (Harihar *et al*., 2015:128).

The above section reviewed factors that may influence pro-conservation attitudes and behaviour, but where the authors did not place them into the categories of benefits or losses/costs. Hence, the researcher has grouped them as 'other factors'. Benefits and losses are now reviewed in Sections 2.7.1 and 2.7.2 respectively.

## 2.7 Benefits and losses/costs

**The second research gap is an inadequate knowledge regarding benefits and losses/costs** for local communities. As mentioned in Chapter 1, a deeper understanding of the facilitators and barriers to pro-conservation behaviour is required (Ferse *et al*., 2010) as there are still gaps in scholarly knowledge on **what** makes local communities conserve (Berkes, 2004; Coria & Calfucura, 2012; Imran *et al*., 2014; Kiss, 2004; Mbaiwa & Stronza, 2010; Walpole & Goodwin, 2001). Benefits and losses/costs appear to play a part in this. Numerous studies have been done worldwide on the importance of benefits accruing to local community members due to the presence of tourism and conservation initiatives (Dewu & Røskaft, 2018; Jamal & Camargo, 2014; Mbaiwa & Stronza, 2010; Pfueller, Lee & Laing, 2011; Snyman, 2012 a & b; Tran & Walter, 2014). In spite of this, less research has focused on which benefits are more important to encourage conservation, and why (Stronza & Gordillo, 2008). More recently, Cetas and Yasué (2017:210) affirm this, arguing that "More research aimed at uncovering the costs and benefits of conservation in very specific cultural contexts may improve the understanding of why people engage in conservation projects".

In addition, **as part of this second research gap, compared to tangible benefits, there is even less focus on intangible benefits.** Stronza and Gordillo (2008:450) highlight the difficulty of measuring and evaluating non-economic/intangible benefits across sites or over time. They state further that "this is partly because non-economic factors are often expressed in qualitative or context-specific narratives that defy easy ranking or comparison". In spite of the fact that studies have revealed non-economic benefits to be important, and that income generation is not enough to encourage pro-conservation behaviour (Stem *et al*., 2003), intangible benefits are seldom analysed as a potential causal mechanism for conservation (Stronza & Gordillo, 2008). Stronza and Gordillo (2008) urge that these should be considered because they influence the stability of local institutions as well as the success of long-term collective action towards biodiversity conservation. Stronza and Gordillo (2008) add that, in their study in the Amazon, participants seldom mentioned economic benefits in isolation from social changes, suggesting that the combination of both is so important. More recently, Cetas and Yasué's (2017) review

of 120 articles relating to motivation and conservation success in and around protected areas, found that intrinsic motivation resulting from social capital, autonomy and competence encouraged pro-conservation behaviour. They advocate for these intangibles to be viewed as additional benefits stemming from a conservation project, and not to only focus on tangible benefits.

**The final part of this second research gap is that there is also less focus in the literature on losses/costs, than there is on benefits.** Research on benefits for local communities is more common (such as Gurung & Seeland, 2011; Lapeyre, 2010; Reimer & Walter, 2013; Waylen *et al.*, 2009), but there is less focus on losses/costs incurred due to the presence of a protected area. For example, Mbaiwa and Stronza (2010), Nyaupane and Poudel (2011), Odindi and Ayirebi (2010) and Stem *et al*. (2003), in their research involving communities and conservation areas in Botswana, Nepal, South Africa and Costa Rica respectively, mention costs briefly but they do not feature in their findings. Other authors of primary research articles in this field provide a sentence or paragraph on costs in their findings, for example, Sachedina and Nelson (2010), Walpole and Goodwin (2001) and Wunder (2000). Only a few articles grapple with losses/costs as a focus, such as Gadd (2005); Kideghesho *et al.* (2007); Lee (2013); Mehta and Heinen (2001); Shibia (2010); Sommerville *et al.* (2010); and Swemmer, Mmethi and Twine (2017). Stronza and Gordillo (2008) and Tran and Walter (2014) do interrogate costs, but benefits get far more attention. In addition, a common cost emerging is that of human-wildlife conflict or wildlife/conservation induced costs (Gadd, 2005; Kideghesho *et al.*, 2007; Shibia, 2010; Sommerville *et al.*, 2010), and less on social losses/costs.

Losses/costs thus do not appear to receive equal attention in the literature as do benefits. Yet when community stakeholders encounter losses/costs, it can result in opposition to protected areas (Kideghesho *et al.*, 2007), with major negative consequences. The paucity of studies on costs borne by communities due to the presence of tourism and conservation initiatives, aligns with Sachedina and Nelson (2010), who explain that in the context of protected areas with local communities on their doorsteps, there is a need to develop a deeper understanding of **both** the costs and benefits of these parks. Stem *et al*. (2003) approach it from the ecotourism perspective, stating that it is important to examine the costs **and** benefits more critically; while Stronza and Gordillo (2008) state that this full range (both positive and negative) is seldom evaluated in terms of conservation at the local level. In newer research on improving park-people relationships, Allendorf *et al.* (2017) assert that mitigation of costs **and** promotion of benefits can be clear pathways for improving the attitudes of local people towards protected areas. Hence, this research gap reveals another area that requires attention.

The above section has outlined the research gap of inadequate understanding of benefits and losses/costs. It highlighted that there are knowledge gaps in terms of which benefits matter most, as well as in terms of intangible benefits and losses/costs. With this in mind, together with the background set in Sections 2.5 and 2.6, the researcher now delves into specific benefits and losses identified in literature which claim to influence attitudes and/or behaviour.

### 2.7.1 Benefits

The accrual of benefits by local people due to the presence of tourism and conservation initiatives is important (Jamal & Camargo, 2014; Jhala *et al.*, 2019; Mbaiwa & Stronza, 2010; Pfueller *et al.,* 2011; Snyman, 2012 a & b; Tran & Walter, 2014). There are various ways to classify benefits. Stronza and Gordillo (2008) distinguish between economic and non-economic benefits, and characterise the latter as community empowerment benefits, while other authors class them as facets of social capital that help strengthen local institutions for resource management (Lee, 2013; Liu *et al*., 2014; Matarrita-Cascante *et al*., 2010; Stronza & Gordillo, 2008). They can also be referred to as intangible benefits (Mbaiwa & Stronza, 2010) or indirect benefits (Gadd, 2005; Stem *et al*., 2003). The most dominant category is that of direct benefits, also referred to as economic, financial or tangible benefits. For the purposes of this study, the terms tangible/direct and intangible/indirect benefits are used.

Several authors cite the importance of equitable benefit distribution (Agrawal & Gupta, 2005; Calfucura, 2018; Ferse *et al*., 2010; Giampiccoli *et al*., 2015; Gurung & Seeland, 2011; Larson, Conway, Krafte, Hernandez & Carroll, 2016; Scanlon & Kull, 2009; Sommerville *et al*., 2010). This is explicitly done because benefit distribution is frequently unequal (Berkes, 2004), with several studies reporting that a small group of elite get most of the benefits, the majority might get some benefits, and the poorer, most vulnerable, section of the population get fewer benefits or none (Agrawal & Gupta, 2005; Gurung & Seeland, 2011; Sommerville *et al.,* 2010). Nyaupane and Poudel (2011) state that benefit distribution should take into account equity concerns so that the first to benefit are those who suffered the most due to conservation activities. For example, Sommerville *et al*. (2010), in their study in Madagascar, noted the lack of adequate benefits to those who faced the highest agricultural opportunity costs due to conservation.

Moreover, to avoid unrealistic expectations and the associated discontent when these are unrealised, protected area management needs to be open and transparent regarding what benefits can realistically be expected. Thondhlana and Cundill (2017:214) put it this way, also connecting transparency to a healthy relationship: "… in cases where reserves may be unable to produce sufficient benefits for local communities due to their location, size and large number of people expecting benefits, these issues should be openly discussed. To achieve this however, it is critical that protected area management first develop good working relationships with local communities via comprehensive dialogue, listening actively to local communities and undertaking a needs-based analysis as a basis for developing conservation strategies in line with community expectations. Without establishing positive relationships between local people and conservation officials, simmering discontent may escalate into bigger conflicts that could jeopardise both conservation goals and livelihood needs".

A further issue is that despite considerable benefits being received, communities sometimes fail to recognise them. The importance of communities being aware of benefits received is also highlighted in

Section 2.5.1. Apart from awareness of benefits, peoples' view of benefits is also affected if the level of benefits received is low compared to the costs communities bear due to the presence of a protected area in near proximity (Infield & Namara, 2001:53).

Tangible and intangible benefits are now discussed. The context of the importance of benefits and the fact that distribution should be fair, equitable and transparent; as well as 'marketed' to beneficiaries should be borne in mind.

#### *2.7.1.1 Tangible/direct benefits*

Most of the tangible/direct benefits tend to be **economic benefits**. Imran *et al*. (2014) identify several studies that show economic incentives as important motivators to encourage locals to view conservation and tourism as potential sources of finance; which in turn can change local people's perceptions of their environment and increase commitment to conservation. In the findings of Imran *et al*. (2014), the community was willing to conserve the environment if financial incentives were attached. Similarly, Kiss (2004) contends that if tourism earnings are very high, local people will deliberately protect biodiversity to safeguard this income. In more recent research, Masud *et al.* (2017) also found that economic benefits inspired communities to participate in ecotourism practices.

In contrast to the above views, some studies highlight that economic benefits should not necessarily be seen as a benefit. Kiss (2004), for example, adds the caveat that high earnings are uncommon, and that, even if such income is obtained, locals might use it to invest in activities that threaten the environment, such as expanding their agriculture. Other reasons cited are that economic benefits trigger changes in communal life and that profits are not enough to support all families (Stronza & Gordillo, 2008). Gadd (2005) also cautions that financial benefits alone are risky, because if they are interrupted or discontinued, local people may see the prime reason for conserving as no longer existing. This could have disastrous effects on the environment. In the same light, Fennell (2008), reflecting on the research findings that financial incentives are often needed to get indigenous communities involved in conservation, is concerned that conservation then stems from self-interested motivations rather than a philosophy of custodianship. In response to these issues, Gadd (2005) therefore advocates a combination of economic and non-economic benefits; while Stoll-Kleemann (2005), after conducting interviews with over 100 specialists working in protected areas, concluded that there was a major need to improve the design of economic incentives. In this line, Burgoyne and Mearns (2017), in their research with a Maasai community in Tanzania found that money alone was insufficient – it had to be combined with genuine interest in the people and resource sharing. Furthermore, money for community projects such as schooling did more to improve positive perceptions than donations that might not benefit all.

Specific direct/tangible benefits are now discussed, most of which amount to economic beneficiation.

***(a) Formal employment*** related to tourism (De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Lee, 2013) is one of the most commonly cited benefits. Collins (2016), referring to the Makuleke people, termed it the greatest flow of income to individuals. This can be skilled employment such as being a camp manager, tourist guide or builder, or semi-skilled employment such as being a porter, cooking, cleaning or gardening (Mbaiwa & Stronza, 2010; Ward *et al.*, 2018). Snyman and Spenceley (2012) acknowledge additional benefits that people employed in tourism could receive such as accommodation, food, training, medical insurance and pension contributions.

***(b) Payment for conservation actions***. Sachedina and Nelson (2010:390) found that tourism ventures where direct payments were made to communities in return for certain conditions written into the contract, were very effective in encouraging conservation. In three villages near Tarangire National Park in Tanzania, community-private tourism agreements were implemented, where defined conservation actions at the local level were written into formal contracts, and payment depended on these actions taking place. These actions included land being set aside and protected by these communities. This resulted in 38 600 ha of community land being protected for wildlife by the community themselves. In contrast, where payments were made to communities with no conditions attached (for example, by hunting concessions), little conservation took place on community lands, and the community did not add further land for conservation purposes. This is in spite of the fact that significant financial benefits accrued from these concessions (Sachedina & Nelson, 2010). The authors conclude by stating that passive benefit-sharing approaches have had little impact in encouraging pro-conservation behaviour by communities in this area (Sachedina & Nelson, 2010). In similar research by Sommerville *et al.* (2010), a Payment for Environmental Services (PES) scheme in Menabe, Madagascar, distributed benefits to the community based on them meeting forest management criteria. Results indicated that the community as a whole had benefited positively from the PES scheme. Locals showed an active interest in the results of forest management with the authors stating that "these forest guardians thus, encouragingly, appear to be local advocates for forest conservation" (Sommerville *et al*., 2010:1267). In newer research on tiger conservation in northern India, Harihar *et al*. (2015) conclude that providing choices to communities can mitigate a sense of alienation from conservation objectives, promoting instead a sense of partnership (see Section 2.6, Point 'k'). Of importance to this section is that these choices are conditional on people protecting tiger habitat. The authors thus contend that these options should be branded as incentives for tiger conservation, Ferse *et al*. (2010) appear to concur with the point of incentives in return for conservation action, stating that while management should continue to involve communities, there must be solid rules which are jointly arranged through a participative approach, and strict enforcement of these rules with government/state support.

***(c) Sustainable harvesting of natural resources for the community members' own use*** (Allendorf *et al.*, 2006; Allendorf, Swe, Aung & Thorsen, 2018; Rahman *et al*., 2017). Odindi and Ayirebi (2010) point out the importance of engaging with women as key actors in sustainable community management and with respect to conservation and natural resource use, because they are often the ones at home who

will utilise the environment, for example, collecting wood or thatching grass. Mbaiwa and Stronza (2010) in their study on the effect of tourism development on rural livelihoods in the Okavango, Botswana, determine the extent to which natural resources are used to improve rural livelihoods. The list (derived from several authors) includes resources such as water, thatching grass, firewood, grazing for livestock, fodder, timber, fish, fruits, seeds, nuts, berries, mushrooms, bulbs, reeds, tubers, medicinal herbs and hunting of game for meat and skin (De Boer & Baquete, 1998; Ghoddousi *et al.,* 2018; Nyaupane & Poudel, 2011; Snyman & Spenceley, 2012). Matarrita-Cascante *et al*. (2010), in the community they studied (La Fortuna in Costa Rica), determined that direct access to natural resources was associated with improved economic conditions. **Access to natural resources for local communities is always important** (Berkes, 2004; Gadd, 2005; Imran *et al*., 2014), and if this is denied, opposition is likely (Berkes, 2004). However, allowing limited access to natural resources can stimulate more demand, as was found by Infield and Namara (2001) in their research at Lake Mburo National Park. This increased demand was either due to the resources allowed being insufficient to meet the demands or expectations of the community; or simply too little to improve their economic situation.

The study by Waylen *et al.* (2010) revealed that the success of CBT was not predicted by the provision of economic and practical benefits. They agree with the authors above regarding use of natural resources within protected areas as a benefit, but take it further by advocating that communities should have **control over natural resources** as this results in greater support and concern for conservation. An example of this is the Chobe Enclave Conservation Trust in Botswana. Following an unsuccessful era of management that was concerned only about conservation and not human needs (which resulted in illegal hunting and the setting of fires), the trust was born. Following the advent of the trust, the communities became active participants in decision-making and governance of natural resources. Today the community has wildlife user rights, receiving a quota of animals which they can choose to hunt or sell to hunting outfits (Stone & Nyaupane, 2018).

In the following studies, **zoning or 'buffering'** emerged **as an important tool in combining resource use with conservation –** Stoll-Kleemann's (2005) GoBi study on protected areas in various tropical and subtropical countries; Nyaupane and Poudel's (2011) study on communities around Chitwan National Park (Nepal); and Licona *et al*.'s (2011) research on ungulates in the Amazon. Local people then use biological resources according to the zone. Ideally the core zone is strictly protected and consumptive use of resources prohibited. This zone will typically be surrounded by one or more buffer zones where resource use is allowed within specified limits. Added to this can be enclaves for local communities and corridors for wildlife (to allow safe passage through zones) (Stoll-Kleemann, 2005). This approach allows use of natural resources in a controlled manner.

Linked to access and control of natural resources is the fact that due to the presence of a protected area, **these resources are often conserved**, whereas they may not be to the same extent in the absence of formal conservation. For example: Mehta and Heinen (2001) report on two studies in Nepal where one

of the main reasons people liked the parks was that the forest was being conserved; research by Allendorf *et al.* (2006) in upper Myanmar showed that locals were highly positive about the fact that the forest and wildlife were being conserved, and that the climate had improved; and the study by Cobbinah, Black and Thwaites (2015) in Ghana, revealed that, in spite of some unfulfilled promises, locals were committed to conservation because the conservation area was a watershed for rivers and streams used by the community.

***(d) Informal/indirect employment*** related to tourism (Roe & Elliott, 2006) is a further benefit. This includes encouragement of **entrepreneurship** and increased **small business opportunities** (Giampiccoli *et al.*, 2015; Lee, 2013; Mbaiwa & Stronza, 2010; Saufi *et al.*, 2014; Stronza & Gordillo, 2008; Swemmer *et al.*, 2017). These include making and selling crafts or products (Mbaiwa & Stronza, 2010; Roe & Elliott, 2006); selling food (Stronza & Gordillo, 2008); providing transportation and other services (Snyman, 2014; Stronza & Gordillo, 2008); providing cultural entertainment (Gurung & Seeland, 2011); lodge construction and renovations (Collins, 2016); and tour guiding, owning small shops and renting out accommodation (Ghoddousi *et al.*, 2018). Informal employment not related to tourism and formal employment not related to tourism should also be considered. Though these two do not constitute a benefit from tourism or the environment, they are significant because income from any source will reduce a family's need to utilise the environment for survival. This also emerged as one of the 'Other factors' discussed in Section 2.6.

***(e)*** Further sources of tangible income are ***revenue from tourists, protected areas and local governments*** (Jhala *et al.*, 2019; Lee, 2013). This could be in the form of community levies, gate fees, rentals paid to the community for usage of their land; donations towards community development projects (Snyman, 2014); and dividends received from community funds, for example, cash pay-outs, funeral assistance, and pensions (Mbaiwa & Stronza, 2010).

*(f)* ***Community development projects*** which occur because of the presence of the protected area and tourism (Mehta & Heinen, 2001). This includes **infrastructure** due to tourism (Snyman, 2014), often from Corporate Social Investment ventures by tourism companies, for example, clinics, educational facilities, new social facilities such as community halls, feeding schemes, water supply and roads (Burgoyne & Mearns, 2017; Lee, 2013; Snyman, 2012b; Stronza & Gordillo, 2008). Community development projects also include **improved services** due to tourism, for example, potable water, sanitation and electricity supply (Stronza & Gordillo, 2008). Community development projects arise too from increased **support from the government** (De los Angeles Somarriba-Chang & Gunnarsdotter, 2012), often because of the presence of tourism, for example, better roads. In addition, dividends received from community funds to provide housing for the poor and elderly and transportation services (Mbaiwa & Stronza, 2010) are further inclusions.

Swemmer *et al*. (2017:167) contend that "although infrastructure and service delivery is not the primary mandate of conservation, this type of support has become a mandatory part of the public/private land lease agreements … in some countries". Kruger National Park, for example, uses funds derived from the 1% community levy added to entrance fees, to fund educational infrastructure (Swemmer *et al*., 2017). Cetas and Yasué (2017) and Kohler and Brondizio (2017) concur, referring respectively to social justice as a tangible benefit, and social services as an important need that should be met. Kohler and Brondizio (2017) further caution that not meeting these needs will undermine the success of conservation initiatives. Stem *et al*. (2003) put it this way – that through supporting local infrastructure and development projects, one is buying goodwill with the community.

***(g)*** Finally, ***general community support*** from the conservation area and/or tourism initiative, such as loan of a vehicle or tractor, assistance with funerals and donations of meat and wood for community functions (Mutanga *et al*., 2017; Swemmer *et al.*, 2017) constitute another form of tangible beneficiation.

This section has set out various tangible/direct benefits emanating from the literature reviewed. In the following section, the intangible benefits are explored.

#### *2.7.1.2 Intangible/indirect benefits*

As mentioned in Section 2.7, a research gap identified in this study is that, compared to tangible benefits, there is less focus on intangible benefits. "Economic benefits may be paramount to success, but non-economic ones can also influence chances for conservation" (Stronza & Gordillo, 2008:449). Campbell *et al*. (2007) support this view regarding economic benefits being important, but propose that community benefits such as unity and community learning are often more highly valued. Berkes (2004) even argues that rural communities in the developing world seldom equate benefits with simple monetary rewards, and that various types of social and political benefits are also likely to prove important. A further reason to focus on intangible benefits is that if pro-conservation behaviour is only practised because economic benefits are received, there can be dire consequences should tourism decline or donors withdraw (Gadd, 2005). Gadd (2005) therefore stresses the value of building on intangibles in the form of local aesthetic values and traditional beliefs, which value the natural environment for itself; and of having a combination of economic and non-economic benefits.

To further highlight the importance of intangible benefits, some sources report that these influence pro-conservation attitudes and behaviour **more** than tangible benefits. For example, Stem *et al*. (2003) found that pro-conservation perspectives (attitudes) were stronger when people enjoyed indirect tourism benefits than when they had the direct tourism benefit of employment. Income generation is not enough to ensure conservation, and pro-conservation behaviours are more associated with participation in indirect tourism benefits (Stem *et al.*, 2003) such as empowerment (Gadd, 2005). Hence, despite less

research on intangible benefits (refer to the research gap in Section 2.7), these benefits appear to positively influence community wellbeing, as well as pro-conservation attitudes and behaviour. It is therefore worthwhile exploring them in this research.

An interesting addition to this discussion concerns the Makuleke people in the Kruger National Park, who received "a host of intangible benefits that [they] got from their land ownership that they do not recognise", such as training, village development and increased price and self-esteem (Collins, 2016:78). This suggests that intangible benefits may not fulfil the claims of the authors above simply because they are not recognised. The importance of communicating benefits to local communities is therefore highlighted again.

With the value of intangible/indirect benefits established above, specific intangible benefits identified from literature are now provided.

***(a) Skills training and learning new skills (capacity building)*** (Collins, 2016; Mbaiwa & Stronza, 2010; Saufi *et al.*, 2014; Stem *et al*., 2003; Stronza & Gordillo, 2008). Stoll-Kleemann (2005) identifies the need for creative capacity building amongst community stakeholders in order to achieve successful management of protected areas. This includes training local people in skills that reinforce conservation such as tour guiding, working in lodges (in-service training) and sustainable land-use techniques; and providing environmental education and bursaries for tertiary education (Swemmer *et al.,* 2017). However, Stoll-Kleemann (2005) also highlights the challenge that, while many managers are trained wildlife experts and wildlife managers, some may not have the necessary people skills to build capacity, train local people, negotiate with local people and raise funds for capacity building initiatives. Training programmes for protected area staff may therefore be necessary.

***(b) Personal growth in business, management and leadership skills.*** Examples of this type of personal growth for community members includes broader experiences in managing people and projects, leadership skills, increased confidence, the opportunity to develop professional relations (Stronza & Gordillo, 2008) and exposure to private sector and business thinking (Mbaiwa & Stronza, 2010). Stronza & Gordillo (2008) note that women in particular acknowledge the personal growth from assuming new roles and engaging in more activities beyond the household.

***(c) Devolving power, ownership and participating in decision-making*** are important benefits if one wants to see conservation by communities taking place (Allendorf *et al.*, 2018; Bennett *et al.*, 2019; Calfucura, 2018; Krűger, 2005). **Devolving power** appears to be important (Thondhlana & Cundill, 2017). A study in the United Kingdom examining how policy makers could best encourage pro-environmental behaviour concluded that "… devolving power to ground-level agencies and organisations of individuals is the most effective way to encourage change, treating audiences not as passive targets but as active partners in the process of change" (Lucas *et al*., 2008:465). The study by Imran *et al.* (2014:296) of

stakeholders involved in a national park in Pakistan, determined that the community rejected top-down governance as it excluded them from planning and decision-making. In the words of one participant: "If the government wants to do it alone, it will not be accepted". In line with adaptive management, partnering with the community may well be a combination of top-down and bottom-up management. This was the case in a Polish study, where all stakeholders (including protected area managers and communities) opted for an inclusive mixed governance model that balanced central and local influence (Niedziałkowski *et al.,* 2018).

**Ownership** is another important intangible benefit. In recent research on marine protected areas in Malaysia (Masud *et al*., 2017) and on protected areas in Colombia (De Pourcq *et al*., 2015), the researchers report that owning and managing business enterprises, as well as being a fundamental part of tourism and conservation development, is important. The Colombian research showed ownership to be a priority condition to decrease conflict between locals and protected area management.

**Decision-making** too is important, either in conjunction with devolution of power and/or ownership or on its own. Niedziałkowski *et al*. (2018) advocate local communities to be part of decision-making, and suggest that public officials are trained in participatory skills to improve the way in which they work with local communities. In the South African context, for example, where land claims have been awarded and co-management entered into, a common complaint is that communities still do not play a part in decision-making, even though the land is rightfully theirs. Thondhlana *et al.* (2016:410), reporting on research at Silaka Nature Reserve, Eastern Cape, found that 95% of interviewees were not at all involved in decision-making, and felt they were not recognised as the landowners. Some of the reserve management agreed with this sentiment and raised the issue of why the community was not invited to meetings, so that in effect, "we are planning without them". In April 2013 the Sicambeni community forcefully closed the reserve, with the main reason appearing to be lack of community involvement in decision-making in the management of the reserve (Thondhlana *et al.*, 2016). In another study on 13 nature reserves in South Africa, Thondhlana and Cundill (2017) proclaim lack of consultation on reserve management to be a source of conflict. Similarly, research by Zhang *et al*. (2017:94) into conservation in China's protected areas also revealed that "ignoring the rights and interests of communities has impacted negatively on management effectiveness"; and a study by Boillat, Gerber, Oberlack, Zaehringer, Speranza and Rist (2018) determined that authoritarian rule in national parks in Madagascar and Ethiopia respectively hampered the participation of locals and disrespected their rights.

***(d) Increasing skills and support through expanded circles of contacts*.** Kideghesho *et al*. (2007) list **regular contacts between local communities and protected area staff** as a benefit that can improve attitudes and conservation. This contact can also be expanded to other outsiders and can result in **exchange of ideas** (Stem *et al*., 2003) and **strengthened abilities to negotiate with outsiders** (Stronza & Gordillo, 2008). Ultimately these interactions result in improved people skills for locals and **expanded circles of contacts, which generate further support for community efforts** (Stronza & Gordillo, 2008).

***(e) Chances to learn from and interact with people from other cultures/cultural exchange*** (Stem *et al*., 2003; Stronza & Gordillo, 2008). Tolkach and King (2015), for example, list regular host-guest interaction as an important component of CBT. Lee (2013), based on results from a study on Cigu Wetland in Taiwan, suggests that managers should increase activities which improve the perceived benefits of tourism among locals, such as more cultural exchange between locals and tourists.

***(f) Opportunities to learn about the environment and tourism*** (Campbell *et al*., 2007; Stronza & Gordillo, 2008). Communities need to be informed and educated about resource use and environmental impacts (Dewu & Røskaft, 2018; Imran *et al.,* 2014; Kideghesho *et al*., 2007; Stem *et al.*, 2003). Waylen *et al*. (2010) came to the conclusion that interventions providing community outreach and education about conservation had a greater likelihood of successfully changing **attitudes** than those that did not. Similarly, Kaeser, Willcox and Panti (2018) found that gaining new knowledge and being able to influence others regarding conservation practices was more important than economic benefits. Moreover, this learning could increase positive attitudes towards the protected area. Shibia's (2010) finding from Marsabit National Reserve, Kenya, differs though, concluding that conservation awareness plays a minimal role in influencing attitudes.

Some authors found that education stretched to changing **behaviour** as well as attitudes. For example, Imran *et al*. (2014) refer to the importance of ecological understanding, education and opportunities in improving pro-environmental attitudes, which can foster behavioural changes. Stem *et al.* (2003) agree, suggesting that a higher level of awareness or appreciation for nature could favour long-term conservation, and hopefully remain instilled in local people should tourism decline. In contrast to these findings, Owens and Driffill (2008), who examined attitudes and behaviour in the context of energy, revealed that providing information on energy issues could impact attitude but had little or no impact on behaviour.

It is not just about educating on conservation. Giampiccoli *et al.,* (2015) and Saufi *et al.* (2014) highlight that education on tourism is imperative in order to increase participation and decrease economic leakage. Finally, it is important to note that an information or awareness programme is unlikely to be effective if it clashes with other significant influences such as social norms (Owens & Driffill, 2008).

***(g) Heightened cultural identity, cultural activities, pride and self-esteem*****.** Lee (2013) reports positive effects on **cultural identity** and Pfueller *et al.* (2011) note increased **pride** in the local area as intangible benefits. Collins (2016) alludes to the Makuleke community co-management arrangement. The success of this arrangement and the realisation of the value of their land's biodiversity, has boosted **self-esteem** and pride within the community, as well as pride in their culture and traditional authority. Furthermore, Collins links self-esteem to social cohesion. **Cultural activities** can also have a similar influence. In Ghana, for example, Cobbinah *et al.* (2015) recount the effects of the creation of a

traditional bamboo orchestra in the Mesomagor community outside Kakum Conservation Area. This orchestra has developed the community's culture, connected them to their culture, united them, enhanced their image and given them the chance to interact with tourists. In another example, namely the Chobe Enclave Conservation Trust, participation in tourism has built cultural capital. Cultural groups offering traditional dance and crafts have increased the sense of community belonging, revived traditional cultures and increase cultural identity (Stone & Nyaupane, 2018).

***(h) Incentives to remain in rural areas.*** Mbaiwa and Stronza (2010) refer to CBNRM projects having spin-offs that benefit rural development. In their research in the Okavango Delta, community leaders found that these spin-offs helped to keep the youth in the rural areas. In Stronza and Gordillo's (2008) study on three Amazon ecotourism projects, local leaders refer to one of the results of successful ecotourism being to slow the pace of out-migration.

***(i) Increased opportunities for leisure and tourism for community members*** (Lee, 2013). References to this are seldom found in literature. Swemmer *et al*. (2017), referring to Kruger National Park, points out that members of the Traditional Leadership can enter the park for free along with four family or council members; and that the 'half-entry' permit allows local community members who are active in the community forum to enter at half the price of the fee payable by South African citizens. In addition to this example, Lee's (2013) study showed that increasing leisure and tourism opportunities for locals was important and increased the perception of benefits received.

***(j) Intrinsic appreciation of nature.*** Research on four protected areas in Ethiopia indicated that local residents had mostly positive attitudes towards wildlife and the protected areas in their proximity. The reasons attached to the importance of wildlife were that it was attractive to tourists, enjoyable to view, valuable for future generations, and provided hunting opportunities during the drought (Tessema, Ashenafi, Lilieholm & Leader-Williams, 2007). Similarly, a study in Kenya revealed that pastoral communities had an aesthetic and moral regard for wildlife whether they received benefits or not. For example, locals reported enjoying watching elephants (Gadd, 2005). This appreciation was also evident in Myanmar, where the vast majority of forest-dependent respondents mentioned various ecosystem services as benefits, and were deeply concerned about the future of the forest (Allendorf *et al.*, 2018).

Other journal articles show clear support by locals for conservation, for example, for the Malagasy, forest conservation was very important (Ward *et al.*, 2018). Campbell *et al*. (2007), doing research on a community-based turtle conservation programme in Ostional, Costa Rica, discovered that 78% of locals expressed willingness to do more to protect the turtles; while 37% believed that protecting the turtles was the 'best thing' about the programme (as opposed to receiving more direct benefits such as income). The authors found this to be a striking increase from when the same study was done a few years earlier. This indicates that environmental benefits as incentives to conserve, are increasing in importance (Fihlani, 2016).

This intrinsic appreciation of nature can be so strong that the community will support the land being under conservation, even when they are discontented due to unrealised benefits and feeling excluded. This was the case recently at Silaka Nature Reserve (South Africa) and Kakum Conservation Area (Ghana) (Cobbinah *et al*., 2015; Thondhlana *et al*., 2016).

***(k) Social capital.*** Social capital emerges strongly in discussions of intangible or non-economic benefits. It goes by several names, including creation of community unity, community agency, community attachment and community empowerment (Cetas & Yasué, 2017; De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Lee, 2013; Mbaiwa & Stronza, 2010; Pretty & Smith, 2004). There is a growing voice that social capital within the community is essential, and that CBT alone is insufficient to result in sustainable practices (Matarrita-Cascante *et al*., 2010). Social capital is constructed through strong local relationships and interactions; open communication and participation; tolerance and distributive justice (Matarrita-Cascante *et al.*, 2010); relationships of trust; reciprocity and exchange; common rules, norms and sanctions; connectedness in groups (Pretty & Smith, 2004); knowledge sharing; collaborative planning and management; and adaptive legislation and regulations (Imran *et al*., 2014). These aspects in turn increase the adaptive capacity of a community.

Of signficance, community agency has positive spin-offs for biodiversity conservation because it builds up the community to be able to carry out economic, social and environmentally sustainable practices (Matarrita-Cascante *et al*., 2010). It also enables individuals to take actions that achieve positive biodiversity outcomes (Pretty & Smith, 2004). One example comes from Matarrita-Cascante *et al.* (2010:749) who conclude their research by stating that "... community agency resulted in the dissemination of pro-environmental attitudes and actions in the community as a whole … Sustainable goals were often communicated and discussed in formal and informal gatherings. With time, residents exhibited a shifting and growing concern towards protection of the natural environment. As in the case of other attitudes and behaviours (for example, social), sustainable practices aimed at the protection of the environment were communicated, promoted and adopted in La Fortuna. This resulted in La Fortuna's protection of nature, which in turn sustained its natural amenity-driven tourism". Findings by Imran *et al.* (2014) from their study in Central Karakoram National Park, Pakistan, are a further example, where social capital enhanced pro-environmental attitudes. Furthermore, Lee's (2013) research in Cigu Wetland, Taiwan, showed that community attachment (and community involvement) had a significant effect on perceived benefits (but not on perceived costs), which in turn impacted on support for sustainable tourism development. The studies by Lee (2013), Liu *et al.* (2014), Odindi and Ayirebi (2010) and Stronza and Gordillo (2008) also confirm the importance of social capital in forming strong institutions that are instrumental for pro-environmental behaviour, long-term management of shared resources and improved ecological sustainability. People may voluntarily protect a resource near a community-based lodge if they have the confidence that others in the group follow the same rules and will face punitive action if breaking those rules (Stronza & Gordillo, 2008). In contrast, migrants moving

into an area, who do not have a sense of community agency and are not part of these relationships may be ecologically ignorant – unaware of local ecological conditions, traditions and organisations (Ferse *et al.*, 2010:2).

Section 2.7.1.2 has outlined the intangible/indirect benefits found in the literature reviewed. Prior to that, tangible/indirect benefits were dealt with in Section 2.7.1.1. The final component of Section 2.7, namely Section 2.7.2, reviews literature regarding the losses/costs that communities may incur due to bordering or living in a conservation area.

### 2.7.2 Losses/costs

Besides maximising benefits to communities, there needs to be the simultaneous action of **minimising losses/costs to local communities** as, often, there are more people who will have to bear the costs of reduced or no access to a protected area than there are benefits to go around (Snyman, 2014). Kideghesho *et al.* (2007:2225) suggest that "those who experienced higher costs were more likely to oppose protected areas than those who were minimally affected". As mentioned in Section 2.7, one of the research gaps is that there is less focus in the literature on losses/costs, than there is on benefits. To set the background to this, losses/costs that are identified in the literature are highlighted below. At this point in the thesis, the terms 'losses' and 'costs' are used interchangeably.

***(a) Human-wildlife conflict*** is a commonly cited cost, and its influence on attitudes towards conservation is a common topic of discussion. Various single site studies have examined the relationship between human-wildlife conflict and attitudes towards conservation, and found that this negatively influences attitudes (Cobbinah *et al.*, 2015; Dewu & Røskaft, 2018; Gadd, 2005; Ghoddousi *et al.*, 2018; Infield & Namara, 2001; Nyaupane & Poudel, 2011; Snyman, 2012a). Gadd's (2005) study in Kenya, which focused mainly on attitudes towards elephants, found that the most prominent cost was elephants chasing and killing people, followed by crop raiding. Others included elephants disturbing cattle herds and killing livestock. De Boer and Baquete (1998), for example, show that human-wildlife conflict results in less favourable attitudes towards conservation; and that attitudes of respondents were inversely related to the number of species invading their agricultural fields. Namara, Infield and Sumba (1998) also report that a tacit or active support for poaching crept in when crop or livestock losses were not compensated. Snyman (2012b), however, found that a high percentage of community respondents still deemed conservation to be important, even though they had incurred significant losses of livestock and crops due to wild animals, and/or had reduced access to natural resources.

Based on the views above, mitigating damage by wildlife and exploring compensation schemes could help to improve attitudes and promote conservation by local people (Gadd, 2005; Jhala *et al.*, 2019; Nyaupane & Poudel, 2011; Snyman, 2012b). Pechacek *et al.* (2013) explored compensation schemes and concluded that these could improve commitment to conserve biodiversity if done properly and

generously. However, if these schemes are deficient or insufficient, this can result in confrontation that could significantly threaten conservation. For example, in four protected areas with adjacent communities in Zimbabwe, where government is yet to develop a national policy on compensation, this lack has resulted in increased human-wildlife conflict and negative perceptions towards the protected area (Mutanga *et al.,* 2017).

***(b)*** Conservation of a protected area may result in the ***lack of access to natural resources, which could mean the collapse of traditional livelihood options***. Soliku and Schraml (2018) claim that conflicts regarding protected areas in developing countries revolve around negative impacts on community livelihoods. Communities may experience restrictions on their ability to practice crop and livestock farming, and to engage in subsistence hunting and the collection of natural resources (Boillat *et al.*, 2018; Dewu & Røskaft, 2018; Gurung & Seeland, 2011; Nyaupane & Poudel, 2011; Odindi & Ayirebi, 2010; Stronza & Gordillo, 2008; Thondhlana & Cundill, 2017; Ward *et al.*, 2018) Allendorf *et al.* (2006) report that prohibiting natural resource extraction from protected areas was the most common reason for negativity in communities. Examples include Lake Mburo National Park, where communities reported lack of access to park resources to be a problem (particularly conflict over grazing, water, fish and game meat) (Infield & Namara, 2001); and the western Serengeti, where restricted access to water and pasture for livestock correlated with negativity towards the conservation area (Kideghesho *et al*., 2007). The latter authors contend that their results support the hypothesis that locals with more wildlife-induced costs are less likely to support conservation. In more recent examples, Mutanga *et al.* (2017) mention Umfurudzi Park and Gonarezhou National Park, Zimbabwe, where locals can no longer graze cattle or fetch water due to the boundary fence. Cobbinah *et al.* (2015) provide a disturbing account of how local people outside Kakum Conservation Area in Ghana are worse off following the proclamation of the park. These communities used to practice seasonal off-farm extractive activities such as gathering snails, mushrooms, firewood, plants for roofing and food sources, and hunting. In addition, because of poor health facilities, they needed to gather medicinal plants. Due to their previous high dependence on forest resources and no alternatives being offered, many have lost their livelihoods in the name of conservation. These prohibitions, together with wildlife causing loss of crops and livestock, have resulted in antagonistic attitudes towards the park.

Loss of access to resources can also cause behaviour that is detrimental to the environment. Rahman *et al*. (2017:70), for example, relate how forest-dependent people around a Bangladeshi protected area destroyed forest reserves because they were denied access. Their article reports how co-management has since been introduced which allows sustainable utilisation of forest resources, which has improved biodiversity conservation by local people.

***(c) Lack of access to the land for cultural, spiritual and historical reasons***. Conservation efforts may be undermined if protected area management do not take into account the meaning of the land from a cultural and historical perspective. Locals often have a deep non-material connection to ancestral land

such as visiting grave sites, praising their ancestors and performing cultural rituals/ceremonies (Bezerra, 2018; Thondhlana *et al*., 2016). Denial of these can cause deep pain and negative perceptions towards the protected area and its officials (Thondhlana & Cundill, 2017), and be barrier to local participation and a good relationship (Lee *et al.*, 2018). Interestingly, in the research by Thondhlana *et al.* (2016) at Silaka Nature Reserve, while locals felt strongly about this, protected area staff did not mention this loss, which could suggest that staff do not perceive the gravity of this loss for local people. It is thus important for protected area staff and management to realise the intangible significance of the land to local people (Mutanga *et al.*, 2015a).

***(d) Dependency on tourism*** as a single livelihood option is risky (Mbaiwa & Stronza, 2010) and could become a cost if tourist numbers decrease. Participants in Stronza and Gordillo's (2008) study note the increasing dependency on tourism income alone (and the associated laziness with regard to other livelihood options) as a problem.

***(e)*** For those working in tourism or conservation, there are ***social costs associated with the job and/or being away from home.*** These include leaving the family or farm and losing connections with community in cases where the lodges are far away; problems with co-workers; eating strange foods; working long hours on a fixed schedule; new restrictions on time due to involvement in tourism; and erosion of the traditional relations of cooperation and reciprocity (i.e. social capital) (De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Stronza & Gordillo, 2008).

***(f) Increased prices of goods and services*** due to the presence of tourism (De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Lee, 2013) can be considered a cost to local people.

***(g) Increased conflict*** between visitors and locals (Lee, 2013); between park management and locals (Allendorf *et al.*, 2006; Dewu & Røskaft, 2018; Gurung & Seeland, 2011); and between locals themselves (De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Simpson, 2008; Ward *et al.,* 2018) is viewed by these authors as a cost.

***(h)*** In the study by De los Angeles Somarriba-Chang and Gunnarsdotter (2012), local farmers living around two nature reserves in Nicaragua, and who were involved in ecotourism, were concerned about ***social and cultural impacts*** such as drugs and cultural distortions. In Gurung and Seeland's (2011) research on ecotourism and livelihood improvement in the conservation areas of Bhutan, locals also voiced concern over socio-cultural changes, especially that children may no longer want to wear traditional national dress and that tourism would encourage greed among neighbours.

***(i) Environmental impacts*** in the form of damage to the environment from tourism (Gurung & Seeland, 2011) could constitute a cost to local people.

***(j)*** In newer research, Collins (2016) discusses land claims within Kruger National Park, where SANParks management ***changed their minds***, **deciding against co-management with the community, and opting rather for cash payouts or giving locals alternative land.** He explains that this change of plan, which is a loss to the community, has caused confusion, conflict and denied people ownership of ancestral land. Collins suggests that disillusioned community members who see no benefits from conservation have contributed towards the surge in rhino poaching.

***(k) Intrusion from tourists*** and the need to ***share scarce resources*** with them (Tolkach & King, 2015) are further costs.

***(l)*** Finally, ***NGOs withdrawing too soon*** can result in losses for the community. Tolkach and King's (2015) research in the Democratic Republic of Timor-Leste found that NGOs or experts would come in with good ideas for CBT, train locals and then leave – without the community really understanding what to do yet.

Section 2.7 has dealt with benefits and losses/costs, which may influence pro-conservation attitudes and behaviour. The section started by introducing the research gaps relevant to benefits and losses/costs. Section 2.7.1 provided a background to beneficiation and then branched into tangible/direct benefits (Section 2.7.1.1) and intangible/indirect benefits (Section 2.7.1.2). Section 2.7.2 first provided a background to losses/costs and then dealt with specific losses/costs.

The phenomena that form the foci of this study have now been reviewed using existing literature. These included benefits, losses/costs, other factors, pro-conservation attitudes and pro-conservation benefits. Where relevant, different views on their linkages were provided.

Next, Sections 2.8 and 2.9 contextualise the approach taken in this research. Section 2.8 briefly explains the different methodological approaches available in the wider realm of attitudinal and behavioural studies. Narrowing the focus, Section 2.9 then considers literature in the field of communities and conservation to determine their foci of study as well as their methodological approaches, and how these differ to that of this PhD (Doctor of Philosophy) research. The specifics of the chosen research design and methodology, however, are found in Chapter 3.

## 2.8 Methodologies for attitudinal and behavioural studies

The seminal models and theories to test for attitudes or pro-environmental behaviour come from the field of social psychology (McDonald, 2014), namely the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and its extension, the Theory of Planned Behaviour (TPB) (Ajzen, 1985). Much of this research focuses on a single desired behaviour. These two theories assume that people evaluate the implications of performing a behaviour before they decide to engage in it or not to engage in it; make

rational decisions based on a systematic evaluation of the information at their disposal; and choose options with greater benefits than costs (Ajzen, 1991; McDonald, 2014). The models assume that understanding the predictors of a specific behaviour allows interventions that can better target and improve that behaviour. Other commonly used models focus on moral and normative concerns, such as the New Environmental Paradigm Scale (NEP), the Norm Activation Model (NAM) or the value-belief-norm theory of environmentalism (VBN). These focus on the role of environmental concern and moral obligations on pro-environmental behaviour (Steg & Vlek, 2009). While qualitative additions are beginning to be made, all of the above are traditionally quantitative measures, making use of measuring scales (Han, 2014; Kopnina, 2011; Montaño & Kasprzyk, 2008).

As seen above, few of the traditional approaches aim directly at determining actual behavioural actions. This is probably because, as cautioned by Steg and Vlek (2009), it is difficult to measure actual behaviour. Yet it is possible, and Steg and Vlek (2009:315) themselves write that "it is advisable to measure actual behaviour whenever possible". Some attempts to measure actual **behaviour** in the field of communities and conservation include the works of Campbell *et al*. (2007); Liu *et al*. (2014); Novriyanto, Wibowo, Iskandar, Campbell-Smith and Linkie (2012); Sommerville *et al*., (2010); and Waylen *et al.* (2010). Steg and Vlek (2009) discuss self-reporting of behaviour, stating that some researchers see this as a reliable indicator of actual behaviour, while others do not. Self-reporting, however, is the approach used by most of the authors above. While the current research does not use specific items to test for actual behaviour, the qualitative approach used in this thesis aims to elicit some self-reporting. Studies aiming to determine **attitudes** in this field include Allendorf *et al.* (2006); Gadd (2005); Infield and Namara (2001); Kideghesho *et al.* (2007); Mehta and Heinen (2001); Stem *et al.* (2003) and Stronza and Gordillo (2008).

While quantitative approaches still lead, today **no single theory, model or conceptual framework dominates** (Glanz, Rimer & Viswanath, 2008:3). As will be made evident in Section 2.9, in the literature reviewed in the field of communities and conservation, few authors constrain themselves to the traditional methods when researching attitudes and/or behaviour. In this field, a wide range of measuring instruments and approaches – frequently self-designed – is used. Examples of flexible behavioural and attitudinal studies in the field were provided in the previous paragraph. Similarly, this thesis also departs from traditional attitudinal and behavioural models and research instruments, using pragmatism to determine what works best to answer the research objectives.

## 2.9 Comparing this research to related work

The table in Appendix A summarises the work of the authors who conducted primary research relating to the field of communities and conservation. This table includes only articles that were in the **original literature review** conducted up until January 2015, **as these were the articles that shaped the research gaps, direction and methodology at the outset of this study.** In other words, none of the sources subsequently added in blue text are included. Moreover, Appendix A only includes the articles cited in

Chapter 2 which made use of **primary research**. There are 39 such articles. Therefore, although cited in this chapter, authors writing reports or making use of secondary data (other researchers' work) to write literature reviews or essays, are not included in Appendix A. This section is a meta-analysis of these 39 articles to determine their **focus, geographic area, choice of participants, entities involved and methodology** – for the purpose of comparing them to the approach chosen for this PhD research.

### *(a) Focus*

In terms of the focus of the studies, 34 of these articles concern local communities, and most of these have a specific link to a protected area or conservation project (31 articles). Only three of these articles relate to environmental projects in the urban environment. Nineteen of the articles focus on the links between tourism and local communities, for example ecotourism or CBT projects of various types. Twenty-one articles are about benefits or participation as a benefit. While a few of these use the term 'benefit', others refer to how the tourism programme can contribute to/supplement socio-economic conditions. Two of the articles specifically focus on social capital/interaction (which can be a benefit) to help achieve pro-conservation behaviour. Among the articles addressing benefits of some sort, only three of these include a main focus on the negative aspects, terming these costs or obstacles to participation. In terms of attitude and behaviour, 11 articles have a focus on attitudes, four on pro-conservation behaviour, and three on both attitudes and behaviour.

Out of all the primary research articles which were reviewed, only two include in their foci the aspects of attitudes, behaviour and benefits accruing to a local community due to the presence of a protected area with a tourism venture (Stem *et al.*, 2003 and Waylen *et al.*, 2009). Since behavioural studies are less common, if one removes that from the equation and only considers studies which focus on attitudes and benefits accruing due to the presence of a protected area, five studies qualify. Four of them also include tourism as a focus (Gadd, 2005; Mehta & Heinen, 2001; Walpole & Goodwin, 2001; Waylen *et al.*, 2009). **Certain gaps emerge, namely, there appears to be a lack of: articles with an equal focus on losses/costs *as well as* benefits; articles which investigate pro-conservation attitudes *and* behaviour; and articles that combine *all the following as key foci*: benefits, attitudes, behaviour, protected areas and their tourism ventures.** The above exercise validates the need for the focus chosen for this research.

### *(b) Geographic area*

In terms of the geographic areas studied in these 39 articles, the vast majority are in developing countries. Only four studies are based in the developed world and concern the USA, Taiwan, China and Australia respectively. The dominance of research in developing countries is to be expected due to a greater presence of communities living on the borders of protected areas in these parts of the world. The articles written about developing economies span several continents. Eleven countries within Africa are represented. Out of these, Odindi and Ayirebi's (2010) research is based in South Africa, while Snyman (2014), focuses on six southern African countries, one of them being South Africa. This meta-analysis indicates that **research within this field based in South Africa would provide value.**

***(c) Choice of participants***

Most of the studies reported on in Appendix A deal with a protected area or areas but the choice of participants differ. This leads to the **third research gap, namely that most studies focus on local communities and few include the perspective of conservationists and those involved in managing tourism within protected areas.** In the conclusion to Stronza and Gordillo's (2008) research in the Amazon, they suggest a path forward aiming towards a framework to assist in analysing benefits from ecotourism. One of the steps, they assert, is to assess both emic and etic data relating to benefits, i.e. how local people perceive and respond to benefits (emic); and how outsiders such as conservationists and those involved in offering tourism do (etic). With these dual data sources, one can gain a "more comprehensive understanding of what benefits are (and for whom), and why and under what conditions they lead to positive outcomes for broader goals of conservation and development" (Stronza & Gordillo, 2008:462). Stronza and Gordillo (2008) add that this type of analysis has been relatively uncommon in this gap, stating that researchers tend to study only these relationships focusing on the communities' viewpoint. Yet their research in Zimbabwe revealed interesting differences in perceptions between park staff and community members. Thondhlana and Cundill (2017) noted that a lack of understanding of the perceptions of both parties makes it difficult to negotiate settlements that achieve both conservation and livelihood goals. They stress the importance of involving both of these constituencies: "Examining both actors' perspectives is profoundly important because local communities are often directly affected by conservation efforts while conservation officials have to implement any policy changes. In other words, achieving the goal of integrating biodiversity conservation with local development can translate from principle to reality if the views of local communities and conservation officials are considered" (Thondhlana and Cundill, 2017:213). The latter authors also found sharp contrasts between perceptions of reserve managers and those of the local communities. Prior to the work of Mutanga *et al.* (2015 a & b), Mutanga *et al.* (2017) and Thondhlana and Cundill (2017), which the researcher only discovered after write up of primary research, the researcher did not find references to differences in perceptions in the literature she covered. The above-mentioned authors highlight this third research gap. The reader is reminded that in this thesis, the constituency comprising the local community is referred to as C1; and the constituency comprising conservation managers, conservationists and those involved in tourism in the protected area are collectively referred to as C2.

To further support this gap, in the 39 articles containing primary research which broadly shaped the focus of this study (Appendix A), only three involved the constituencies of the community **as well as** conservationists and those involved in tourism. These were based in Pakistan, Nepal and Vietnam respectively (Imran *et al*., 2014; Nyaupane & Poudel, 2011; Tran & Walter, 2014). Even so, each of these differed from the direction in which this PhD research was heading. Two had additional participant groups – Imran *et al.* (2014) included tourists while Nyaupane and Poudel (2011) involved NGOs and CBT organisations. Tran and Walter's (2014) study focused on gender and therefore included gender specialists. The majority involve members of the local community, with 18 studies focusing only on local community participants. In varying degrees, other studies add further participants such as those

involved in tourism, NGOs, protected area staff and managers. The studies which followed a similar approach to that of this doctoral study, namely community members, conservationists and those involved in tourism offerings as participants, amount to three:

- Imran *et al.* (2014) involves community members, tourism enterprises, staff working in protected areas as well as tourists (the latter are not part of this doctoral research) linked to Central Karakoram National Park in Pakistan;
- Nyaupane and Poudel (2011) look at three communities surrounding Chitwan National Park in Nepal, and participants include park employees, local people, tourism entrepreneurs as well as NGOs and community-based organisations (the latter two are not part of this doctoral research); and
- Tran and Walter (2014) involve community members, national park leadership and staff involved in gender and ecotourism in the Giao Xuan community adjacent to the Xuan Thuy National Park in Vietnam. (The article focuses on women's participation, which is dissimilar to the present research).

Hence, while these three have similarities, it is clear that **in terms of participants, this doctoral research is unique.** Talking only to one party involved in this all-important relationship could be hampering our understanding. More comprehensive insight could be gained by including both parties, namely the community and staff involved in the protected area, either in a conservation or tourism capacity.

### *(d) Entities*

From the studies focusing on communities around protected areas/conservation projects, 13 articles focused on one entity, for example, one village/community or one protected area and those living around that one area. Twenty studies focused on more than one entity, for example, three protected areas or four villages surrounding a protected area. Of those with more than one entity, in 13, the entities are similar, for example, all four villages participate in the conservation programme or all three protected areas have conservation projects that are community-based. This is akin to comparable case study selection. For the other seven with differing entities, varying approaches were followed, examples of which are listed below. This is similar to having contrasting case studies.

- Gadd (2005) chose communities representing **different** land-use structures;
- Infield and Namara (2001) and Tran and Walter (2014) involved those who had **been part of** a conservation programme or ecotourism programme respectively and those that **had not**;
- Stronza and Gordillo's (2008) participants were those **highly engaged** in ecotourism projects and those **less engaged**; and
- Nyaupane and Poudel (2011) as well as Saufi *et al*. (2014) researched communities at **various stages** of tourism development.

**No study followed the approach of this research in terms of the entities chosen, namely protected areas which had different management models and ownership structures; and were at different stages in the level of improvement in human wellbeing offered to surrounding communities**. Hence

the focus of this study is unique. In addition, moving beyond the 39 articles covered in the above overview, and unsurprisingly, no study has been done which covers all three of the protected areas dealt with in this thesis.

### *(e) Methodology*

The **fourth research gap is that less studies in this field are purely qualitative.** Bennett (2016) in his review on using perceptions to improve conservation and environmental management, argues for a plurality of methods in the social sciences to provide a more holistic picture on which to base management decisions. He asserts that preference is given to quantitative methods, but that this in isolation leads to an incomplete picture of the multiple facets involved in conservation. The final component of this article analysis is the **methodologies** used, and the results thereof support this research gap. From these 39 primary research articles that shaped the direction of this research, only six were purely qualitative (Matarrita-Cascante *et al.*, 2010; Nyaupane & Poudel, 2011; Reimer & Walter, 2013; Saufi *et al*., 2014; Stronza & Gordillo, 2008; Tran & Walter, 2014), none of which were based in Africa. Within these six studies, the methods used were interviews, participant observation, focus groups and open-ended questionnaires. One source used Appreciative Inquiry, which involved asking open-ended questions to groups of participants. Of the remaining 33 studies, twelve were quantitative and 21 used mixed methods to varying degrees (with eight of these following a strictly quantitative form of analysis).

As mentioned previously, much attitudinal and behavioural research uses the TRA, TPB, NEP, NAM and other models which are quantitative. However, qualitative approaches have started to feature increasingly, either on their own or as part of a mixed method approach. This move demonstrates that attitudinal and behavioural studies are no longer contained within the classic theories. In spite of this shift, quantitative studies still dominate in this field.

Due to the complexities of conducting research in rural areas, the author settled on a qualitative methodology, using a novel mix of methods as the optimal approach. **Hence, the qualitative approach aims to add to the paucity of qualitative research in this field.** In addition, the researcher has not found evidence of the selected bouquet of methods being used elsewhere – none of the 39 articles followed the approach of this PhD research, or used the specific mix of qualitative methods employed in this study. The methodological choices for this research are outlined and motivated in Chapter 3.

In summary, this section has presented a brief meta-analysis of articles that formed part of the literature review, but only those that contained primary research in the field of communities and conservation. Furthermore, only articles in the original literature review (i.e. those not in blue text) were included. This analysis considered the focus of the studies, the geographic area studied, the choice of participants, whether the study focused on one or more entities, and the methodology chosen. Each of these is compared to the approach chosen for this study, and validates the choices made. This research is unique

in terms of its focus, participants, entities chosen and the bouquet of qualitative methods. In the next section, existing schema that link with the field of communities and conservation are presented.

## 2.10 Schema representing the community and conservation area

The final step in the literature review was to investigate existing schema (models or frameworks) that include both the community and the conservation area; as well as other schema that focus on the community only, but provide a contribution, which should be considered when developing an integrated framework as the final output of this study. This section of the literature review casts light on the **fifth research gap, which is that a comprehensive integrated framework which captures the components that could influence people-park relationships does not exist.** Allendorf (2010:417) identifies this gap: "While local residents are recognised as critical to the conservation of protected areas (PAs), most studies are done on a case-by-case basis, with no conceptual underpinnings to facilitate comparisons. The lack of a common framework limits not only our understanding, but also the development of future research areas and approaches to balancing conservation and sustainable development around protected areas. If we are to understand and address fundamental PA–people issues, we need a descriptive framework that enables the understanding of the relationship that people have with PAs and that facilitates comparisons among PAs". Allendorf (2010) does attempt to address this gap by producing the 'Framework for the protected area-people relationship'. While helpful, a more comprehensive framework from the perspective of the many influences on pro-conservation attitudes and behaviour does not exist. This opinion is supported by newer research by Stone and Nyaupane (2018) who provide a brief overview of models and frameworks which link conservation, tourism and community livelihood. They point out that the existing frameworks "are based on simple static concepts and fail to capture the complexity and dynamic nature of the relationships … Moving forward in addressing this complexity, there is a need to overcome the development and reliance on simplified models of complex systems" (Stone & Nyaupane, 2018:309). Wali *et al*. (2017) also argue for a more multidimensional approach to address community wellbeing, contending that economic indices alone are inadequate, and do not take into account other interrelated components that also account for community wellbeing.

This gap, as well as the fundamental purpose of grounded theory, which is to determine what emerges from one's own data, without being forced into preconceived categories at the onset of the study, is the reason why an existing theory, framework or model was not used (and then adapted and tested). Therefore, due to the grounded theory approach of the research design (the other approach being a case study research design), the study does not adopt one theory, model or framework from the outset.

The researcher now examines existing schema (models and frameworks) to take into account what currently exists. Ultimately, this research attempts to address the above-mentioned gap in two stages. The first stage requires constructing a middle-range substantive theory (in diagram format) that is entirely data driven (Research Objective 7.1). This theory is then compared with existing schema in

Section 8.2.3. In the second stage, using the theory, existing schema and existing literature as building blocks, a comprehensive integrated framework is developed to represent the components that influence people-park relationships (Research Objective 8). This process is explained in Section 8.4.

### 2.10.1 Schema that include the community and conservation area

The main condition for inclusion within this section, was that the schema had to represent both the community and the conservation area. Schema that were considered but not included are briefly mentioned below:

- Firey (1960) was arguably the first to craft a model relating to protected area–people relationships. The 'Theory of resource use' represents the overlap between ecological, economic and social dimensions. Since then, several authors have adapted this model. It is not included because Bennett (2016) and Ross and Wall (1999) include these components within more detailed models.
- Abel and Blaikie (1986) present a highly detailed 'Management model for national parks'. While it does include a few people elements such as job opportunities and roads, it has a strong environmental bias, predominantly focusing on different habitats. In addition, it is focused on elephants and ivory.
- McCleave *et al.* (2006) developed the 'Model of the New Zealand people-park relationship' and what affects the relationship. The park and its neighbours are central to the model surrounded by three dimensions: lifestyle, recreation and place attachment; tourism; and interactions with the park management agency. It is not included here because it is more applicable to developed countries and to parks with a well-developed tourism product. It does not capture the components of impoverished communities, resource access, meeting of basic needs, and the like. Of interest to an integrated model, however, is that the 'stage of tourism development' is included as a factor that plays a part in relationships.
- Zube and Busch (1990) propose four models of 'Park-local population relationships'. The four simplistic models show different management approaches that can encourage positive relationships. The models are not included since each one only focuses on a single management approach.

Six schema that include both the community and the conservation area have been selected for inclusion in Chapter 2 (and to be referred back to in Chapter 8). They are described in the points that follow.

***(a) Linkages among biodiversity conservation, livelihood improvement and tourism development***

This framework was developed by Nyaupane and Poudel (2011) to illustrate the two-way relationships between biodiversity conservation, livelihood improvement and tourism development using Appreciative Inquiry in three communities around Chitwan National Park in Nepal (Figure 2.3).

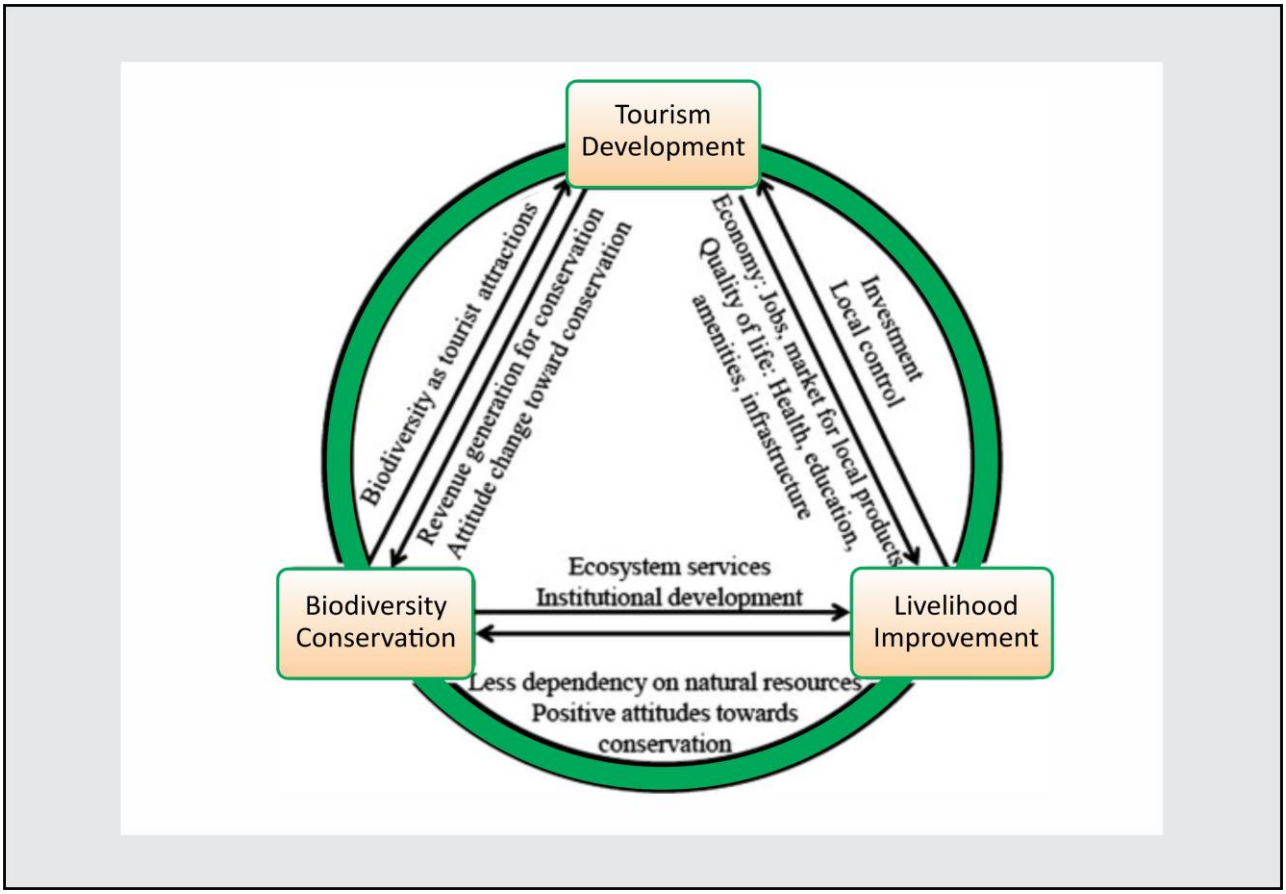



Figure 2.3: Linkages among biodiversity conservation, livelihood improvement and tourism development (Nyaupane & Poudel, 2011:1361)

***(b) Framework to balance conservation and development through synergistic relationships***

The more traditional framework developed by Ross and Wall (1999) considers the balance and synergistic relationships between local communities, biodiversity, tourism and management. The latter play a pivotal role in maintaining this balance through effective management, with a one-way relationship indicated between management and the local community. Ross and Wall's (1999) framework is depicted in Figure 2.4. Later, Tsaur, Lin and Lin (2006) designed a helpful adaptation of Ross and Wall's (1999) framework. They represented 'tourism', 'local community' and 'the resource' as the three corners of a triangle, all interlinked with two-way arrows. Moreover, these two-way relationships were depicted as being of an economic, social and environmental nature.

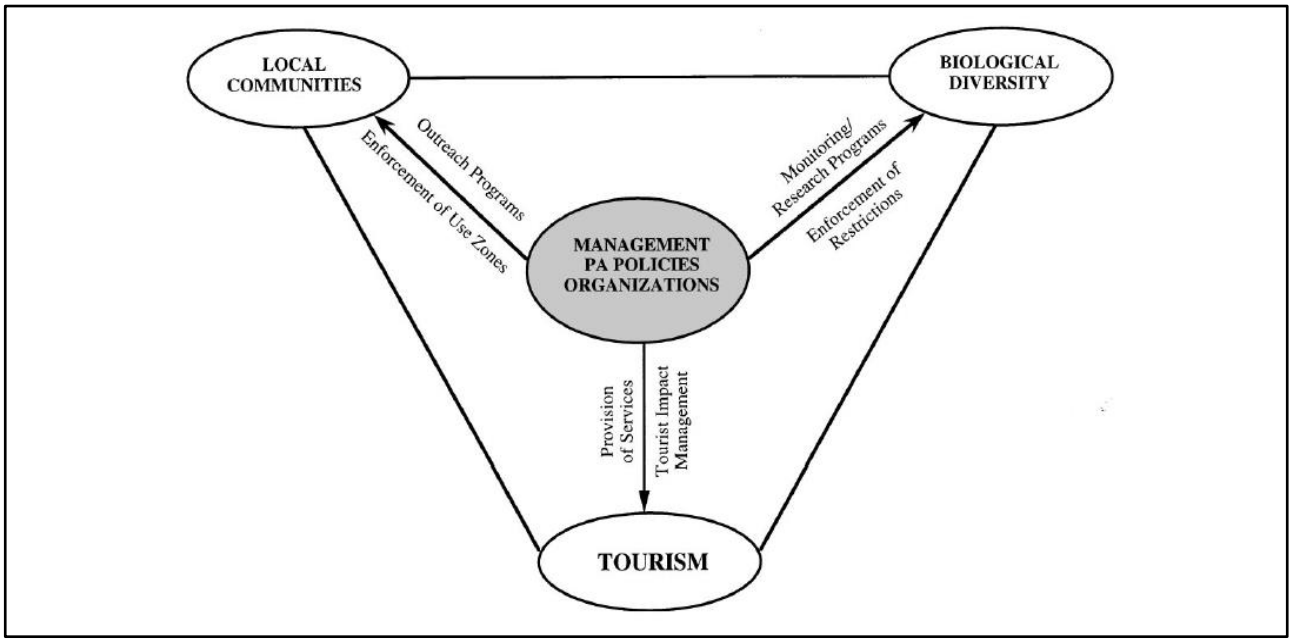



Figure 2.4: The ecotourism paradigm: Synergistic relationships between natural areas, local populations and tourism (Ross & Wall, 1999:126)

### *(c) The linked incentives model of direct linkage as a conservation strategy*

This was developed by Salafsky and Wollenberg (2000) to represent the various linkages between livelihood activities and conservation (labelled as 'biodiversity'). In the original paper, they propose three conservation strategies (no linkage, indirect linkage and direct linkage). Here, only the third is shown as their proposed ideal model (Figure 2.5). In this model, to protect the environment, more attractive livelihood options are provided to those living within the conservation area (who could constitute an internal threat) and to those living outside the conservation area (who could constitute an external threat). Due to the linkages of benefits received, capacity being built and people seeing the value of biodiversity, the idea is that local people will act to conserve.

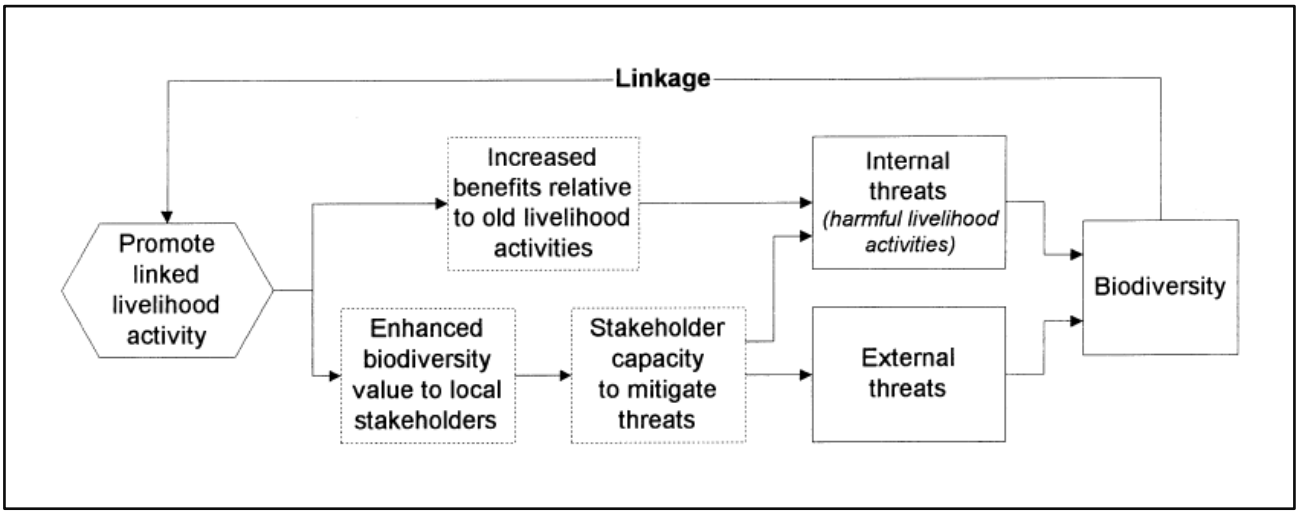



Figure 2.5: Direct linkage: Linked incentives strategy (Salafsky & Wollenberg, 2000:1426)

### *(d) Park-people relationship framework*

Based on research in Nepal and Myanmar, Allendorf's (2010) framework (Figure 2.6) sets out to use universal terms that are applicable and comparable across different cases. Its main components are: people's physical relationship with the protected area (how locals interact and use the area, and the impact of the area on them in terms of costs); their attitude towards the protected area (which includes their perceptions of the area) and relates to whether they like or dislike the protected area; people's perception of other entities such as management, NGOs and government (which can play a direct or indirect role); and the linkage of the people-park relationship to the broader context (social, political, cultural, historical and economic).

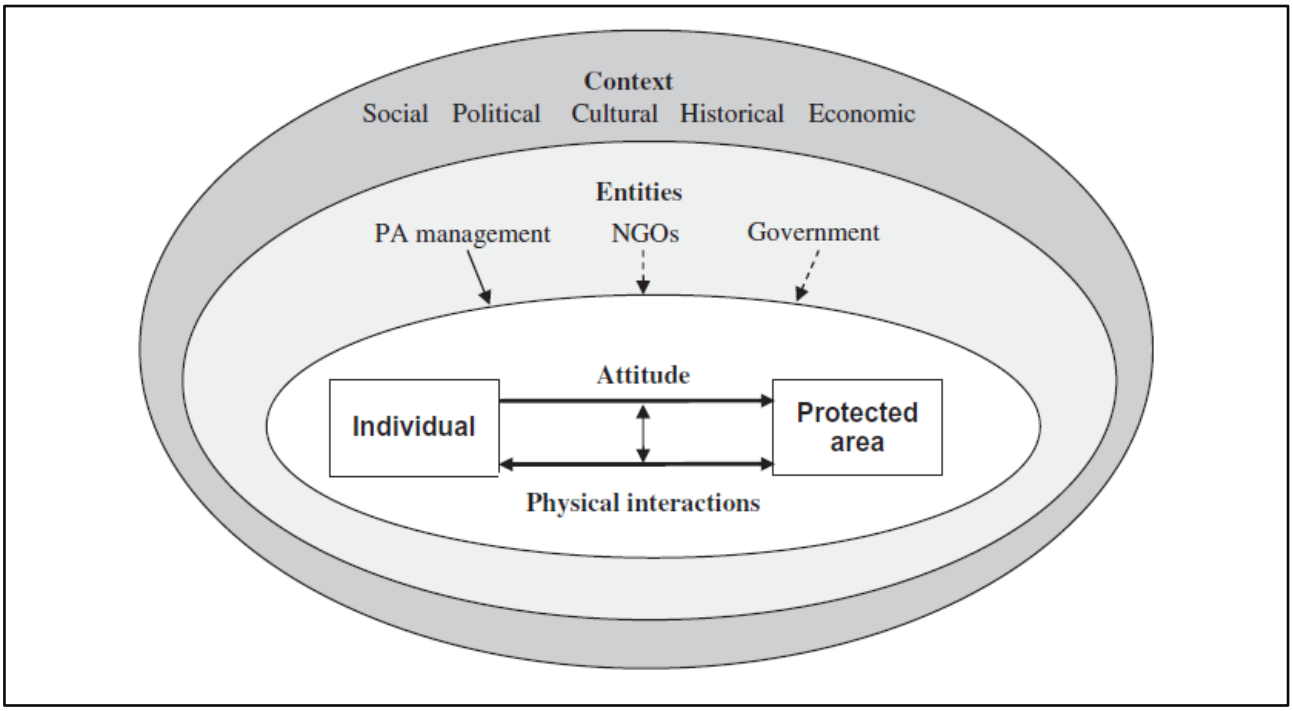



Figure 2.6: Framework for the protected area-people relationship (Allendorf, 2010:418)

* Dotted lines imply indirect relationships while solid lines represent direct relationships. These are examples only. The nature of the line will depend on the specific protected area.

### *(e) Framework depicting reciprocity in protected area-community relationships*

Mutanga *et al.* (2015a) designed a framework for assessing protected area-community relationships, as shown in Figure 2.7. They contend that if these relationships are positive, conservation is enhanced. Their study, based on a literature review, showed that the attitudes of both parties shaped relationships, with four major factors playing a role: history of the protected area in terms of forced relocation and a fences/fines approach; benefits and costs due to living near the protected area; socio-demographic factors such as education level and household size and income; and community involvement in conservation-related projects via ICDPs.

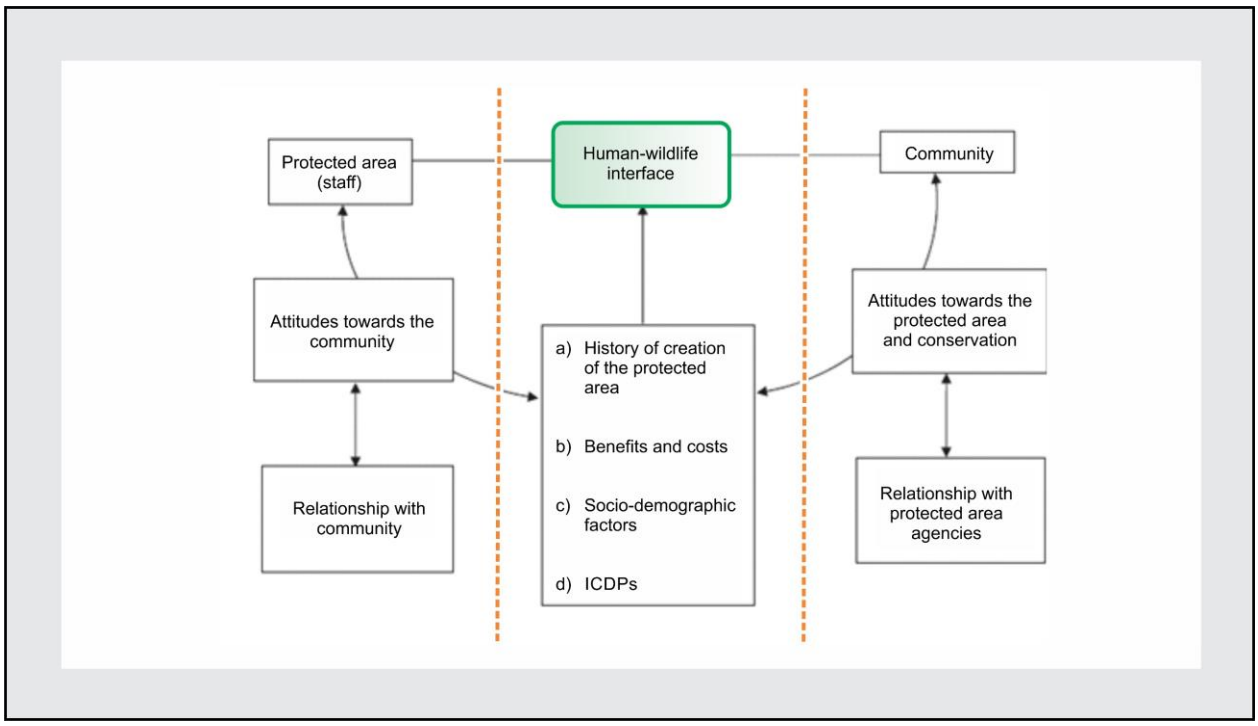



Figure 2.7: Framework depicting reciprocity in protected area-community relationships (Mutanga *et al.,* 2015a:11)

### *(f) Contribution of perceptions to evaluations of conservation and generation of local support for conservation*

Bennett's (2016) paper examines research on perceptions and their contribution to improving adaptive management and evidence-based conservation. He argues that perceptions are often dismissed in conservation science, but that they provide important insights into how to ensure local community support, and thereby enable long-term conservation. Bennett (2016) presents a schema (Figure 2.8 on the following page) that shows the importance of perceptions of different facets (social, ecological, governance and management) which in turn generate or undermine support for conservation. These perceptions are influenced by social context and individual context.

## 2.10.2 Schema that focus on the community

The four schema in this section [subheadings (a), (b), (c) & (d), pp 73-76], do not include both community and conservation area, but focus only on the community. However, they are relevant to the phenomena investigated in this study. They are therefore briefly included here and re-evaluated in Chapter 8, Section 8.4.1 to determine whether they contain a component or components that should be included into an integrated framework as per Research Objective 8.

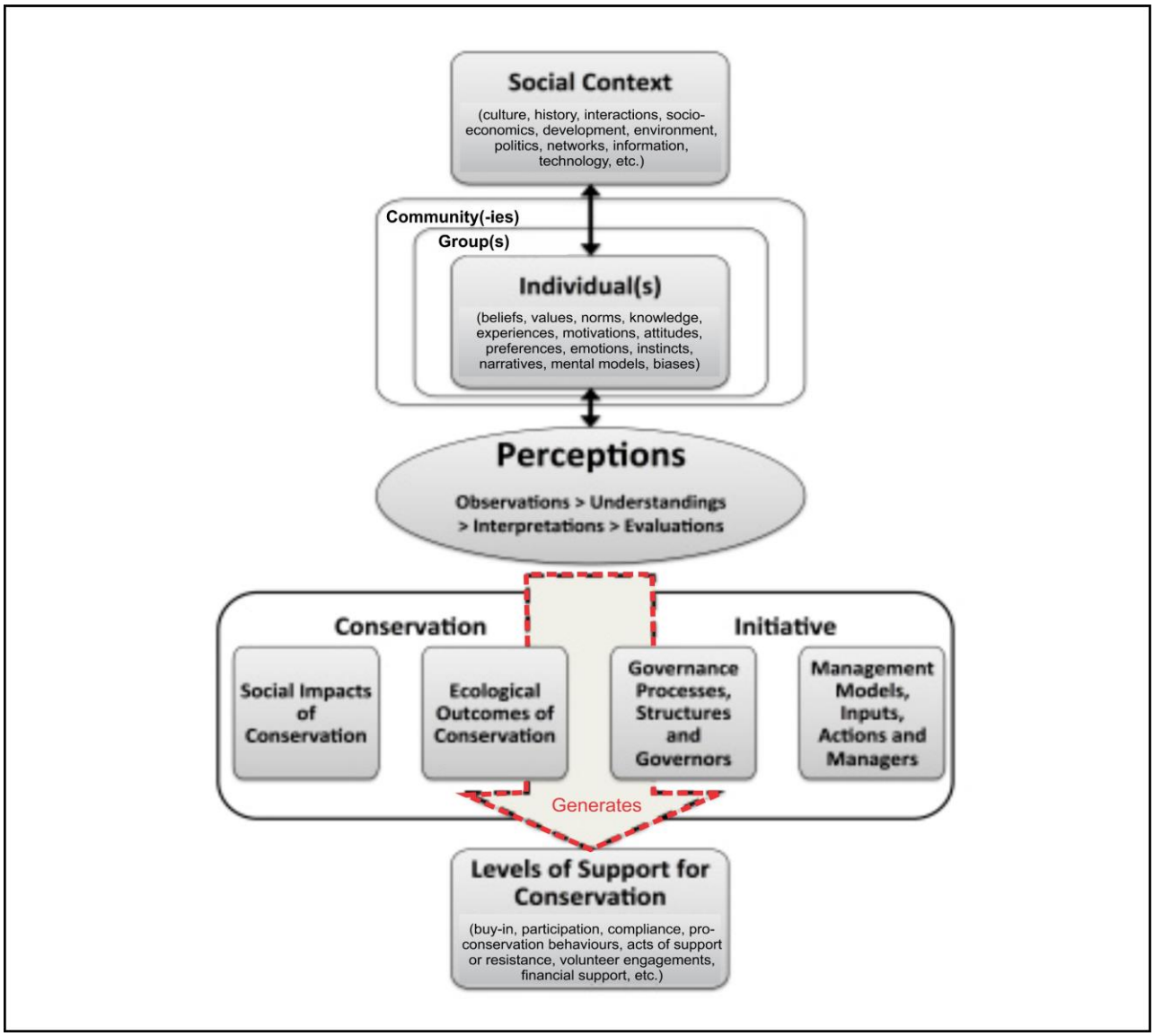



Figure 2.8: Contribution of perceptions to evaluations of conservation and generation of local support for conservation (Bennett, 2016:6)

*Section 2.10.2 continued …*

### *(a) Sustainable livelihoods framework*

This framework, developed by Scoones (1998), is shown in Figure 2.9 and can be used to analyse sustainable rural livelihoods. The framework contains five key indicators: context, livelihood resources, institutional processes, livelihood strategies and outcomes. In different contexts, various livelihood resources are available that are combined to form a particular livelihood strategy that will influence sustainable livelihood outcomes. This process is influenced by different processes and organisational structures. The various options within each of the five key indicators are depicted in the middle section of the framework (Krantz, 2001; Scoones, 1998).

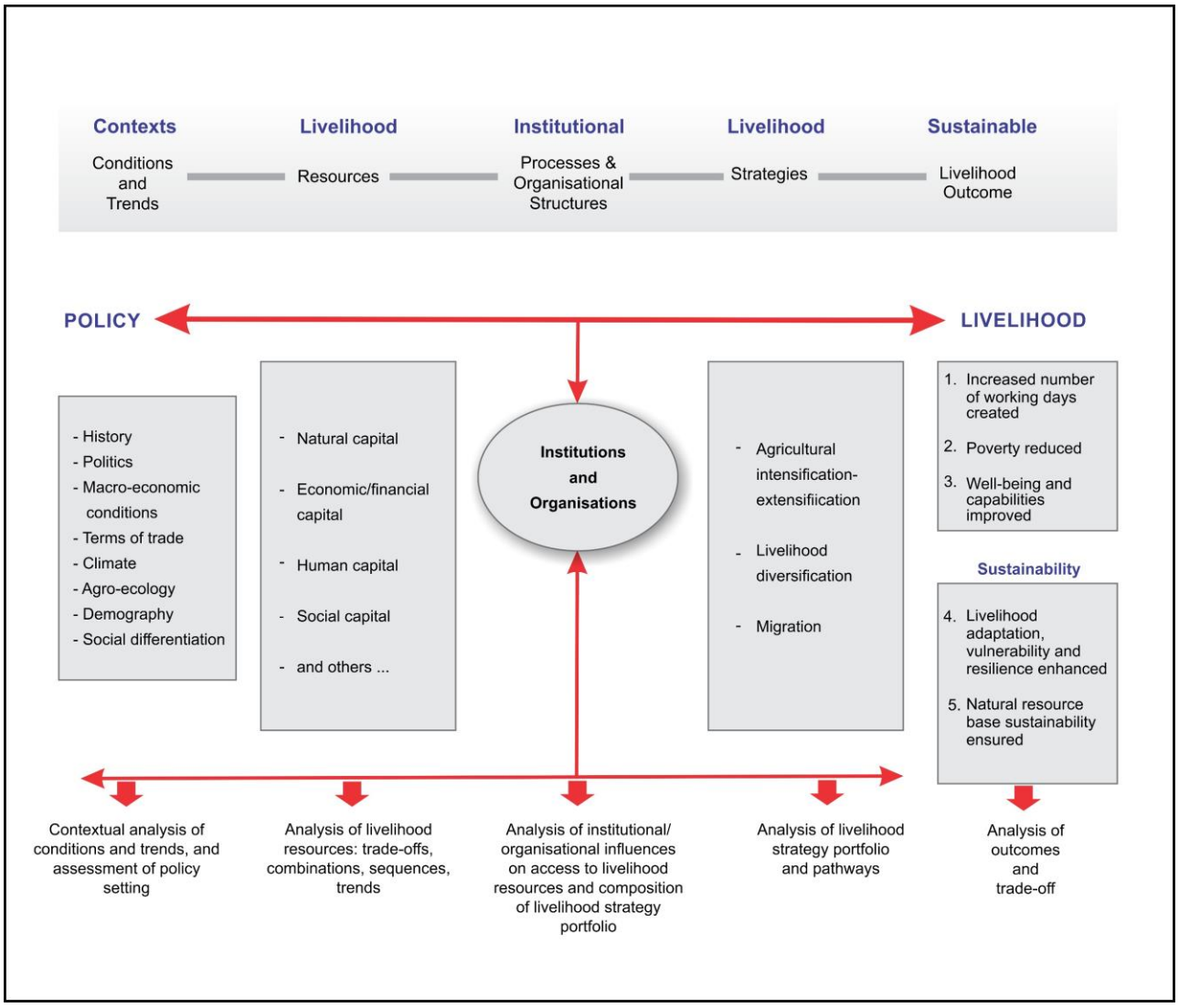



Figure 2.9: Sustainable livelihoods framework (Scoones, 1998:4)

### *(b) Revised model of local participation in planning and managing ecotourism*

This model developed by Garrod, Wilson and Bruce (2001) and provided in Garrod (2003:47) outlines steps to follow in order to foster local participation in ecotourism, as well as good practice in the planning and management of ecotourism projects. The model was originally developed for marine ecotourism in the Atlantic area of the European Union, but its authors argue that it has applicability across a wide spectrum of ecotourism projects in different locations. Garrod argues that participation should not be an 'add-on' but integrated into the planning, as per the steps in Figure 2.10.

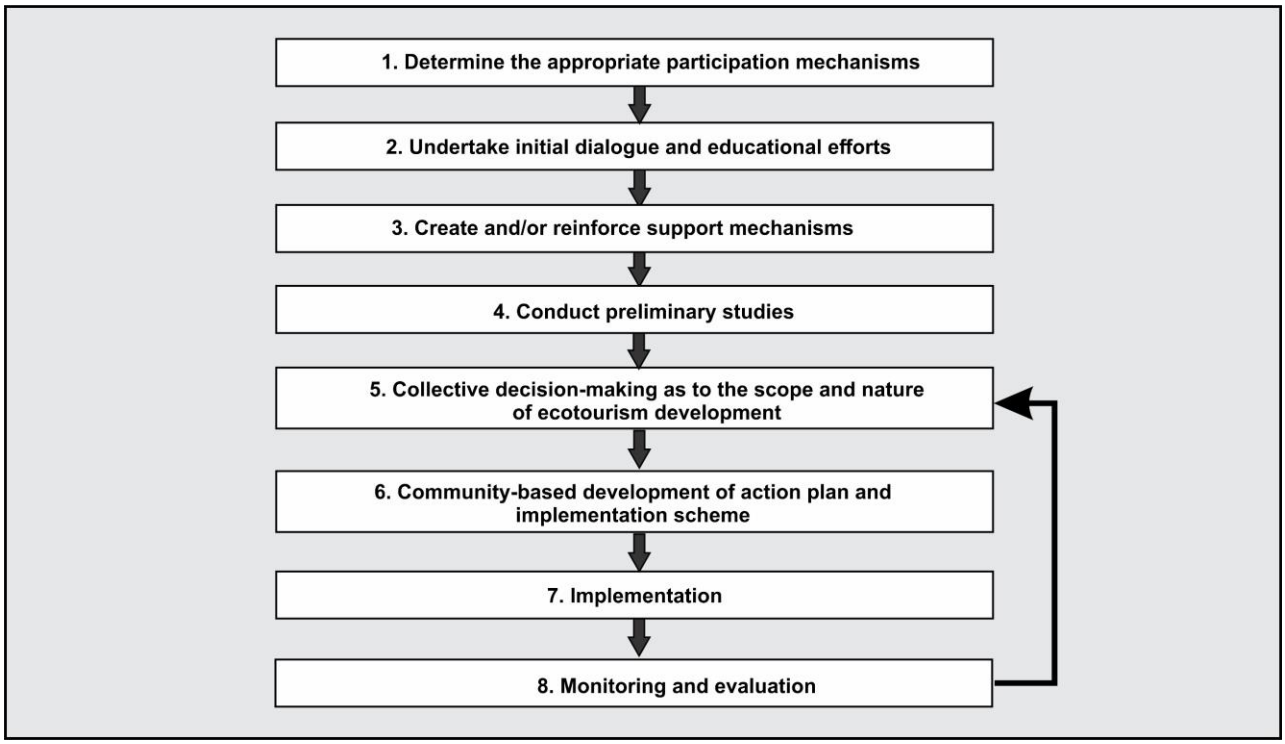



Figure 2.10: Stages of a revised model of local participation in planning and managing ecotourism (Garrod *et al.,* 2001 in Garrod, 2003:47)

### *(c) The 'Stool model' of collaboration for community-based monitoring and education*

The Stool model was developed by Brook, Kutz, Veitch, Popko, Elkin and Guthrie (2009). Developed for a project in Northern Canada, it depicts the four critical supports required to foster community-based wildlife health monitoring and research. These are collaboration; information and analysis; funding; and education. Of key significance in this model, is that a local champion is necessary to 'hold' the supports together – keeping participants engaged and informed, and playing a coordinating role (Figure 2.11).

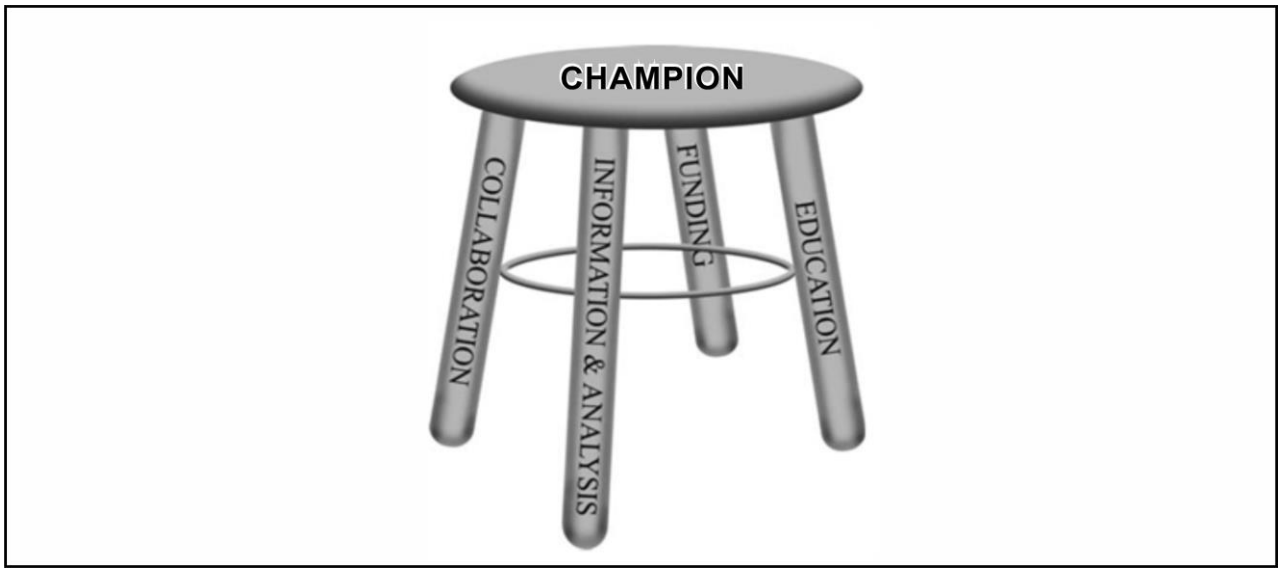



Figure 2.11: The 'Stool model' of collaboration for community-based monitoring and education (Brook *et al.,* 2009:275 adapted from S. Carriere, GNWT, May 2008)

### *(d) Community-Based Tourism E model*

Based on a literature review of CBT across rich and poor countries, Giampiccoli, *et al.* (2015) generated the CBT E model, consisting of eight E's. The authors propose that the E's represent the fundamental pillars against which to evaluate a CBT project. These are endogenous (reliance on natural resources); environment (care thereof as well as physical infrastructure); education (to advance both skills and education); empowerment (economic, psychological, social and political); equity (in terms of distributing benefits and resources); evolving (continuous improvement and adaptation); enduring (long-term sustainability); and supporting entrepreneurship.

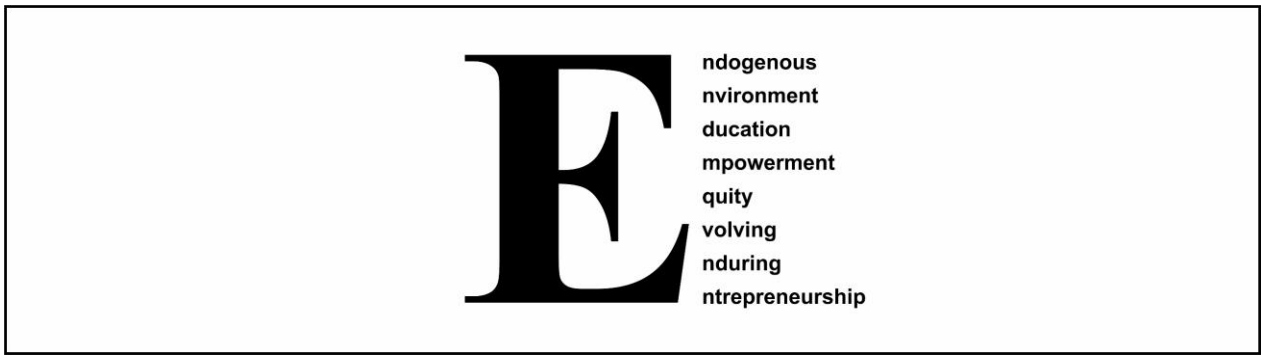



Figure 2.12: CBT E model showing the pillars which Community-Based Tourism should be monitored and evaluated against (Giampiccoli *et al.,* 2015:1210)

In summary, Section 2.10 has examined existing schema to take into account schematic models and frameworks that currently exist in literature. The rationale for this discussion originated from the research gap identified, namely that a comprehensive integrated framework which captures the components that could influence people-park relationships, does not exist. While each of the schema presented hold value, the exercise does indeed demonstrate the lack of a comprehensive integrated framework. This gap will be addressed in two stages in Chapter 8, firstly by comparing the theory produced in this thesis to existing schema; and secondly by integrating the theory with existing schema and other literature to produce a newly synthesised integrated framework.

## 2.11 Literature review summary

The schema in Figure 2.13 summarises in diagrammatic format the key phenomena that emerged from the literature review. Where views differed, these are also presented using question marks, ticks and crosses. The blue text indicates the additions from newer literature (post January 2015). Within the literature review itself, the researcher indicated where newer literature concurred with that found in the original literature review. However, this alignment is not shown in the diagrammatic summary. This is because its purpose is to indicate all facets that emerged, and it is unimportant here which facets were confirmed by newer literature. What is of importance is that new facets emerging in the more recent literature are added to the summary and are indicated in blue. The research gaps presented in this

chapter are also indicated within the summary, embedded in their relevant section (indicated by their number and an asterisk, for example, '3*'). In Chapters 7 and 8, this diagrammatic summary is revisited, comparing it to the findings of this study.

The reader should bear in mind that, while the summary in Figure 2.13 attempts to capture what has emerged in this literature review, in the complex field of the influences on pro-conservation attitudes and behaviour, it will never be all-encompassing.

If the diagrammatic summary is compared to the conceptual framework at the beginning of Chapter 2, the progression is interesting. The key foci and their linkages remain central; the principles emerging from attempted solutions are important; the examination of various choices and methodological approaches is not relevant to the summary but helps to shape the choices and methodology within Chapter 3; and the schema too are not relevant to the summary, but become significant in Chapter 8, when a middle-range substantive theory is constructed and an integrated framework is developed.

## 2.12 Chapter 2 summary

The quotation beginning this chapter suggested that "asking whether community-based conservation works is the wrong question. Sometimes it does, sometimes it does not. Rather, it is more important to learn about the conditions under which it does or does not work" (Berkes, 2004:624). Chapter 2 reviewed a wide body of literature from different disciplines and different fields to understand what needs to be in place to nurture pro-conservation attitudes and behaviour. The original literature in turn informed the researcher's thinking and shaped the research instrument. As per the variant of grounded theory followed in this study, the literature review initially included only literature consulted prior to data gathering. After the write-up of results towards the end of the study, the researcher consulted recent literature that had emerged post-2015, and incorporated it into this chapter. Due to the methodology followed, it was essential to differentiate the newer literature from the old. The pragmatic approach of using blue font enabled new literature to be added into the appropriate sections.

This chapter commenced with a conceptual framework of the researcher's view of the territory being studied at the outset. Key concepts relevant to the study were then explained. Chapter 2 detailed the biodiversity and poverty crisis which sets the context for this study. This was followed by the approaches (solutions) to community conservation and tourism that have attempted to address this crisis, with the most prominent currently being adaptive management. At this point the literature review started to investigate the phenomena that form the foci of this study, starting with the differing views on the various linkages between benefits and losses/costs, pro-conservation attitudes and pro-conservation

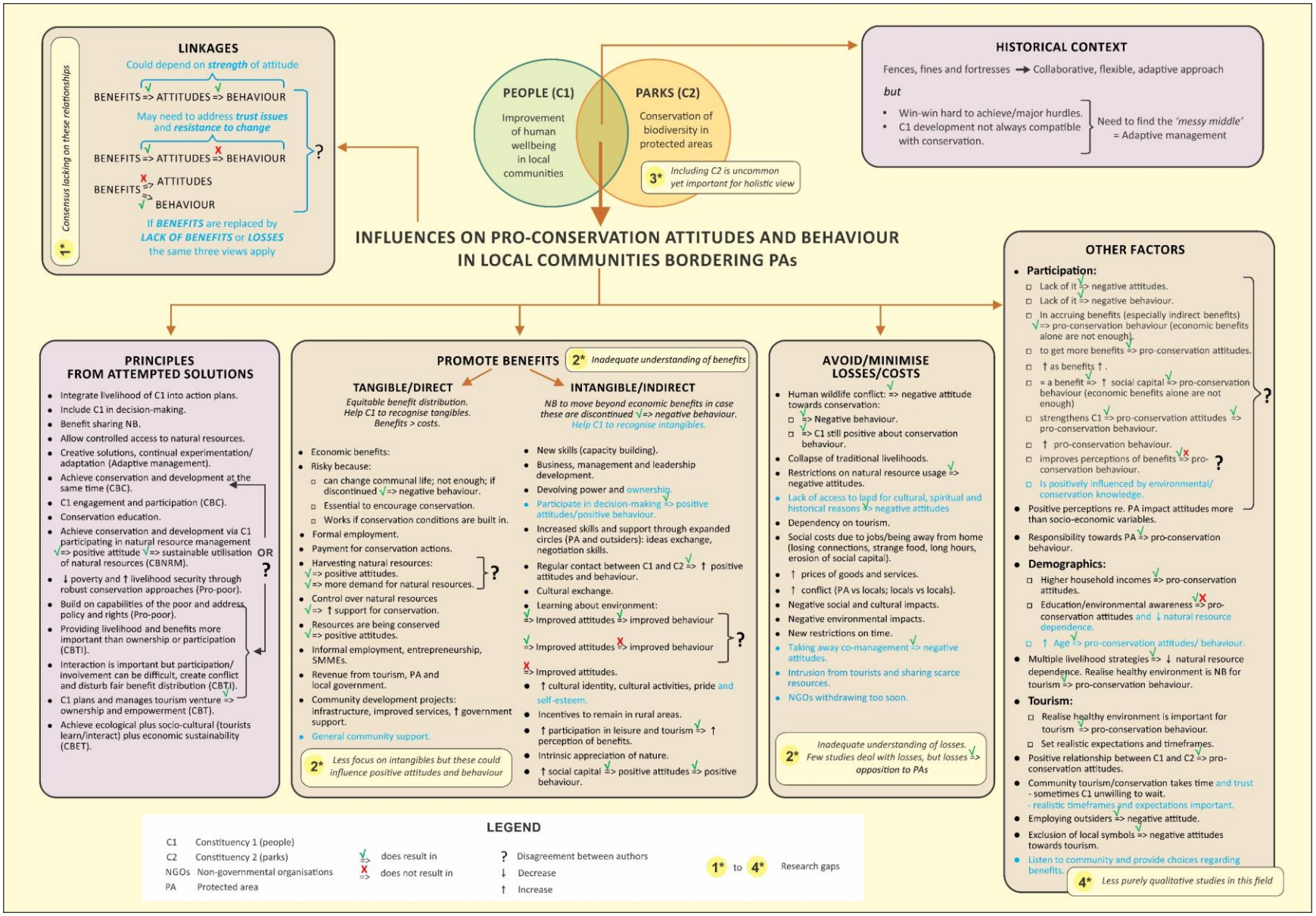



Figure 2.13: Literature review summary

behaviour. A large section of the chapter was devoted to discussions on benefits (tangible and intangible), losses/costs and other factors that could influence attitudes and behaviour.

The next sections of the review contextualised the approach taken in this study by firstly considering methodological approaches in the wider realm of attitudinal and behavioural studies; and then narrowing the focus to research conducted in the field of communities and conservation to determine the foci and methodological approaches taken, and how these differ from this study.

Towards the end of the review, in light of the integrated framework to be produced as the final output of the study, existing schema were presented that represent the community and conservation area together, as well as schema that consider only the community. This was followed by a diagrammatic summary of the literature review.

The primary research findings of this study are compared to existing literature at four stages:

1. During the analysis of each case study (Chapters 4, 5 and 6), findings are compared with other research that has been done on the particular reserve and/or its adjacent community. Due to the paucity of research on the three case studies chosen, this was only done where research could be found that compared or contrasted with the results in this thesis. This literature is not included in Chapter 2.
2. During cross-case analysis, the meta-themes that emerged from the comparison of case studies are compared and contrasted to the literature in Chapter 2.
3. The theory constructed in Chapter 8 is compared and contrasted with the schema discussed in this chapter, Section 2.10.
4. The integrated framework is then developed by combining the theory constructed in Chapter 8, the schema from Section 2.10, and other literature from Chapter 2.

The research gaps are embedded within this chapter. Considering studies from across the world, the gaps identified reveal an inadequate understanding of benefits and costs, with costs and intangible benefits not being given sufficient attention, yet potentially holding crucial influence on pro-conservation attitudes and behaviour in local communities surrounding protected areas. In addition, little research engages the two different constituencies – the local community and protected area staff involved in conservation and/or tourism in the park – to learn from both the people and the park. Since these each have very different contexts, both insights are required for a more holistic view and to provide a better triangulated response to these dual realities. Furthermore, consensus is lacking on the relationship between benefits, losses/costs, pro-conservation attitudes and pro-conservation behaviour. Overall, these research gaps reveal that a fuller understanding is needed of losses/costs, benefits, and other factors that may influence pro-conservation attitudes and behaviour, in order to improve relationships between the people and the parks, and contribute to better achievement of the

dual goals of biodiversity conservation and improvement in the well-being of communities bordering protected areas. The final two research gaps relate respectively to a lack of qualitative studies in this field and to the issue that a comprehensive integrated framework on the people-park relationship does not exist.

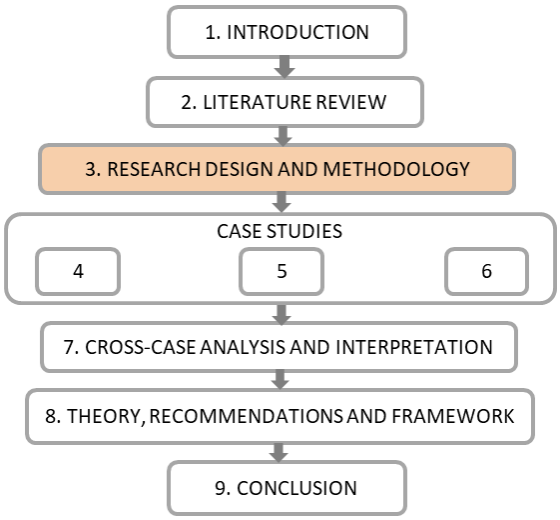
Research Objective 1 set out to review literature regarding the influences on pro-conservation attitudes and behaviour. Chapter 2 achieves this objective.

## Chapter 3

# Research design and methodology

*"No longer is it possible to categorize practitioners of various perspectives, interpretive practices, or paradigms in a singular or simplistic way. The old categories have fallen away with the rise of conjugated and complex new perspectives".*

(Lincoln & Denzin, 2008:539)




## 3.1 Introduction

This research follows a novel methodological approach, in accordance with what Gubrium and Holstein (2014:35) term 'analytic inspiration' or 'explanatory excitement', calling for the need to move beyond methodological divisions and restrictions. They contend that what matters is to provide understanding. This research thus makes use of a novel **comparative multiple-method qualitative approach using contrasting case studies and borrowing from grounded theory**. It is situated within the paradigms of interpretivism and pragmatism.

This chapter begins by covering the approaches, paradigms and research design. Data collection is then discussed, leading the reader through the research instrument and pilot study, and then the sampling procedures and various data collection methods. The process followed for data analysis and interpretation is then described, detailing the use of Atlas.ti; data preparation; data coding, refining and cleaning; data presentation; and the generation of findings via four layers of analysis and interpretation. The chapter continues with measures taken to ensure validity and reliability; a discussion on the generalisability of the findings; ethical considerations; and concludes with an introduction to the case study chapters. Figure 3.1 presents the layout of Chapter 3. The reader is also reminded of Figure 1.3 in Chapter 1 which sets out the research process.

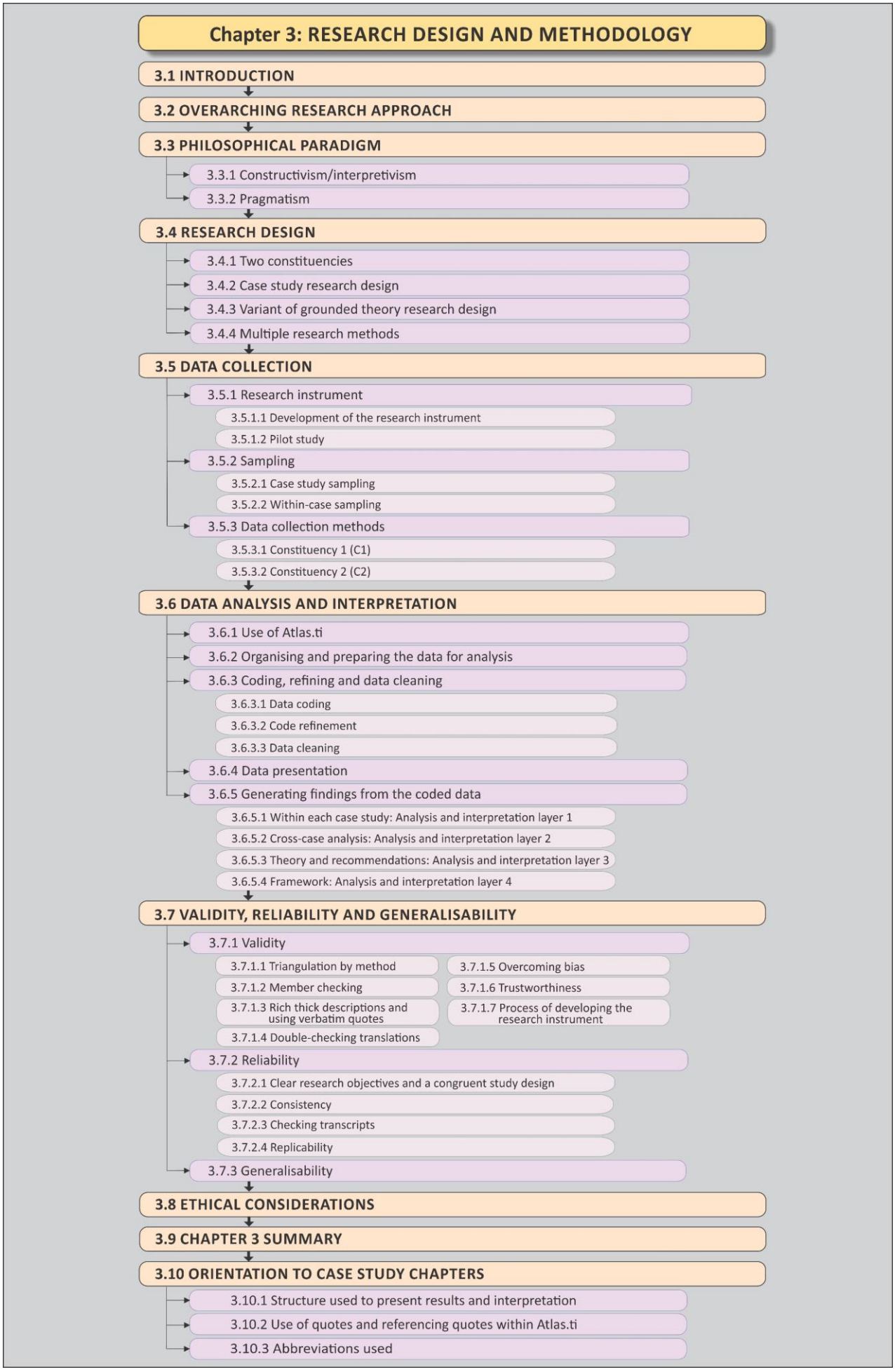



Figure 3.1: Chapter 3 layout

## 3.2 Overarching research approach

As explained in Sections 2.8 and 2.9 and identified as one of the research gaps in Section 1.2, research into pro-conservation attitudes as well as actual behaviour has been dominated by quantitative approaches. However, the interpretivist paradigm is growing in acceptance and needs to be further explored in the South African context. This study therefore followed a qualitative approach as a means to investigate a complex situation (Creswell, 2014), and to understand, in their own words, the feelings, values, perceptions, opinions and experiences of participants that underlie and influence attitudes and behaviour towards the natural environment (i.e. the meaning that individuals and groups personally assign to these phenomena) (Creswell, 2014; Lune & Berg, 2017; Patton, 2005; Roulston, 2014). The researcher thus approached the field without pre-defined categories per question, so that participants would not be limited in expressing their feelings and perceptions. The choice of a qualitative approach also allowed more flexibility to handle the complexities of rural research. As contended by Maxwell (2013:3), "Qualitative research design, to a much greater extent than quantitative research is a 'do-it-yourself' rather than an 'off-the-shelf' process … [involving] interconnection and interaction among the different design components".

In qualitative research, it is important for researchers to reflect on their own position (Cohen *et al*., 2011), as they can be an integral part of the research instrument (Merriam & Grenier, 2019; Mertens, 1998). They may thus influence the behaviour of participants, and bring their understandings to bear on the data analysis (Darke *et al.,* 1998). While the researcher designed the research strategy (and within that, the research instrument) and collected and analysed the data, the focus explicitly remained on the meaning that participants revealed, and not a subjective meaning conjected by the researcher or projected by literature (Creswell, 2014). The researcher distanced herself from influencing participants, using several strategies (discussed later under validity).

## 3.3 Philosophical paradigm

This section deals with the basic belief system (also termed 'worldview or 'paradigm') that guided the research (Creswell, 2014; Guba & Lincoln, 1994; Saunders *et al.,* 2009). Grbich (2007) contends that a researcher can centre themselves within one paradigm or choose to blend them. This research is predominantly situated in the worldview of **constructivism/interpretivism**, but also borrows from **pragmatism**. This section briefly introduces the paradigms, while their application to this research is evident throughout Chapter 3.

### 3.3.1 Constructivism/interpretivism

Constructivism is sometimes called social constructionism, and is often combined or used synonymously with interpretivism (Bohnsack, 2014; Creswell, 2014). In constructivism the researcher believes that

individuals develop varied and multiple subjective meanings of their lived experiences (Cohen *et al*., 2011; Coles *et al*., 2013; Creswell, 2014; Lune & Berg, 2017) and that reality is a construct of social systems (constructed by groups and individuals), and can therefore be discovered through interactions between individuals within social groups (Bann, 2001). Researchers seek deeper meaning and multiple realities (MacQueen & Namey, 2012; Mertens, 1998; Myers, 2020) by interacting with small samples of participants (Guba & Lincoln, 1994) and following a largely inductive approach where meaning emerges from the data collected in the field (Creswell, 2014).

In interpretivism, the aim is to understand the subjective human experience – participants' interpretations of the world around them according to their beliefs and value systems (Cohen *et al.,* 2011; Darke *et al.*, 1998; Grbich, 2007; Merriam & Grenier, 2019). Interpretivism also involves collecting data in the participants' own setting, identifying themes from the data, and interpreting these (Coles *et al*., 2013).

### 3.3.2 Pragmatism

Pragmatism focuses on what works best to answer one's research objectives (Cohen *et al*., 2011; Saunders *et al*., 2009). "Pragmatism is not committed to any one system of philosophy and reality" (Creswell, 2014:11) which, in this study, gave the researcher freedom to draw from both constructivism and pragmatism. Pragmatism was used in the sense that the researcher was free to choose the methods that would best draw out the data required (Cohen *et al.,* 2011), resulting in the use of multiple methods to collect the data; and allowed the researcher to be practical and integrate different perspectives to help analyse and interpret the data (Chinn & Kramer, 2011; Creswell, 2014; Creswell & Poth, 2018; Saunders *et al.,* 2009; Wahyuni, 2012). Bennett (2016:3), writing in the context of conservation science, advocates for pragmatism, asserting that "a pragmatic approach to conservation science requires considering all disciplines and methods when seeking to understand conservation issues and [when seeking] effective solutions". Adopting pragmatism did not allow though for procedural recklessness. The methods were rigorously and systematically designed and applied and are detailed in this chapter.

## 3.4 Research design

Out of the qualitative strategies of enquiry, namely narrative research, phenomenology, ethnography, **grounded theory** and **case studies**, this research borrows from the latter two. Both were equally important in executing the study and producing the key contributions, and the choice of these two is motivated in this section. The use of **two constituencies**, and the **multiple methods** employed within these constituencies were also central to the research design and are thus included here.

Figure 3.2 presents the different elements of the research design. The reader will return to this figure later in Section 3.5.3, when data collection methods are discussed; and in Section 3.6.5, when the

comparative multiple method qualitative approach is discussed as a means to produce findings and arrive at conclusions. At that point, the different layers of analysis and interpretation shown in the figure, will be discussed.

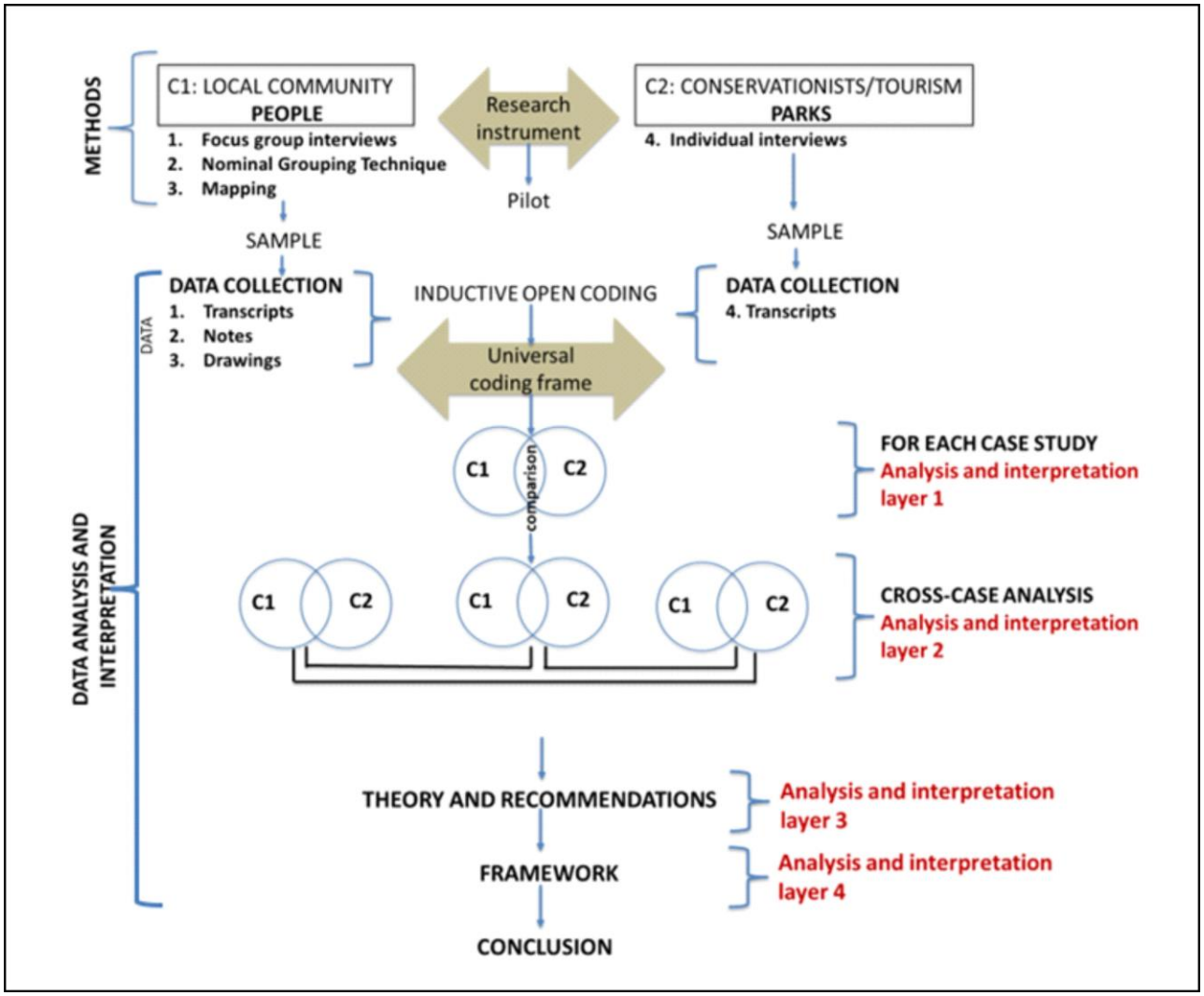



Figure 3.2: Research design

### 3.4.1 Two constituencies

The term 'constituency' was introduced in Section 1.5. In this study, two groups of people (constituencies) were involved to achieve richness and depth; to add externality to the situation; and to enable comparison, triangulation and data verification (Bann, 2001; Cohen *et al.,* 2011).

- **Constituency 1 (C1)** refers to the **local community living closest to the protected area (the people)**. In this research, the terms local community, local people, locals, community members and residents are used interchangeably for C1.

- **Constituency 2 (C2)** refers to **conservation authorities such as the reserve manager, conservationists, as well as others involved in management of the tourism venture/s within the protected area (the park)**. In this research, C2 is collectively referred to as 'protected area management', 'reserve staff' or 'park staff'.

In the philosophical discourse by Berkes (2004), on rethinking community-based conservation, he argues for place-based case studies in order to understand the dynamic interaction between people and parks. In this research, within each case study (discussed next), both constituencies took part so the researcher could learn the views of both.

### 3.4.2 Case study research design

The use of three case study sites makes it a **multiple descriptive comparative case study report**. The **case studies** investigate and describe phenomena in their real-life context (Yin, 2009), aiming to develop theory (Darke *et al.,* 1998). Voss, Tsikriktsis and Frohlich (2002) contend that case study research is powerful, particularly when it comes to developing new theory. Within each case study, the unit of analysis (Miles *et al.*, 2014; Yin, 2009) is C1 and C2.

**Descriptive** studies try to measure the phenomena in as much detail as possible to present a rounded picture (Coles *et al.*, 2013). Using **contrasting multiple** case studies provides a deeper understanding and a fuller picture because diverse settings can be used, it is less vulnerable than single case studies and offers greater analytical benefits (Miles *et al.*, 2014; Cohen *et al.,* 2011; Yin, 2009). It also allows for **comparisons** (Darke *et al.*, 1998). The comparative approach did not only occur during cross-case analysis, but also within each case study as the findings from the two constituencies were compared to one another to examine the case through more than one lens to provide a rich all-round account (Cohen *et al.*, 2011). Multiple cases can be selected to produce similar results or contrasting results. **In this study, the three cases were specifically selected for their contrasting ownership structures and management models, and for being at different stages in the level of improvement in human wellbeing offered to the adjacent community.** These differences are outlined at the start of each case study (Chapters 4, 5 and 6). Beyond the above selection criteria, cases were selected based on convenience and proximity to the researcher's residence.

Within multiple descriptive case studies, multiple sources of data collection and stakeholder groups are preferable to having a large number of case studies (Darke *et al.,* 1998). This aids data triangulation (Cohen *et al.*, 2011; Yin, 2009). In this research, within each case study, multiple qualitative forms of data collection were used to engage with the two constituencies. The case study research design overlaps with the grounded theory design element as the study aims to describe phenomena and develop theory.

The research was conducted at three case study sites. The terms 'case study' and 'case study site' are used interchangeably throughout this thesis. The detailed modus operandi which was followed in the same manner for each case study is documented in the Case Study Protocol (Appendix B). Each case is first analysed separately (Chapters 4, 5 and 6), followed by cross-case analysis and interpretation in Chapter 7 and theory construction, recommendations and a framework in Chapter 8. Figure 3.3 focuses on the case study element of the research design.

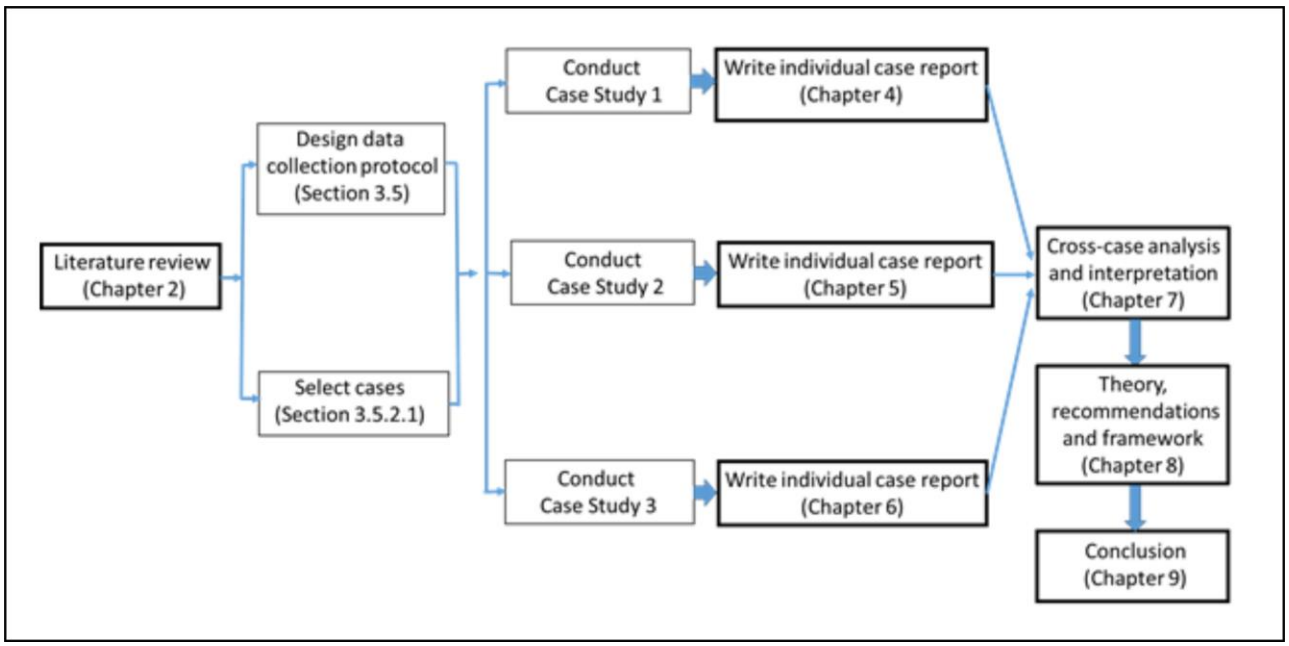



Figure 3.3: Case study research design (Adapted from Yin, 2009)

### 3.4.3 Variant of grounded theory research design

This section first explains grounded theory and its evolution. It then considers the different viewpoints regarding the use and production of theory in qualitative studies, and explains the choices made in this research.

**Grounded theory** was originally developed by Glaser and Strauss as a systematic method with several flexible strategies aiming at constructing theory through analysing qualitative data (Glaser & Strauss, 1967). It was later split into two different variants following a schism in views between Glaser and Strauss (Thornberg & Charmaz, 2014), leading to Glaserian grounded theory and Straussian grounded theory. Original grounded theory (as well as Glaserian grounded theory) has been criticised for its positivist leanings, claiming that the data collected can be objective (Thornberg & Charmaz, 2014); and that one should ignore previous literature to ensure that themes emerging during coding are uncontaminated.

However, the argument that it is impossible to be completely un-influenced by prior theory led Strauss (together with Corbin) to develop the **Straussian approach to grounded theory**, which accepts that the researcher's theoretical knowledge informs the research. Strauss and Corbin (1990:23) define grounded theory as theory which is "discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon". It describes an inductive process of identifying analytical categories as they emerge from data (Grbich, 2007; Pope *et al.*, 2000). The resultant theory should "specify the conditions that result in specific sets of action/interaction pertaining to a phenomenon and the resulting consequences" (Strauss & Corbin, 1990:251).

Since then, other versions of grounded theory have emerged which argue for a **constructivist pragmatic approach to grounded theory**, contending that, as a result of interaction between the researcher and participants, data on multiple realities is gathered and theories are constructed. This process is inevitably influenced by the researcher (Charmaz, 2017; Thornberg & Charmaz, 2014). Turner (1988) in Alvesson and Sköldberg (2009) contends that the qualitative researcher has little alternative than to follow something very close to grounded theory, and to make use of the analytic strategies of Glaser and Strauss' (Charmaz, 2017; Roulston, 2014).

**Several aspects of the present research align with grounded theory**. Data analysis was done inductively, with codes emerging from the data itself (Thornberg & Charmaz, 2014). No literature was referred to during this process. Furthermore, the researcher's interpretations were supported by actual data (MacQueen & Namey, 2012), with analysis motivated by verbatim quotes, and data-based summaries at the end of each question. Cohen *et al.* (2011:539) explain that "a grounded theory and content analysis will proceed through a systematic series of analyses, including coding and categorisation, until theory emerges that explains the phenomena being studied …". This study followed a structured systematic process leading to the construction of a theory that was grounded in the data gathered. The study was also suited to grounded theory and the resultant theory generation as an output, because it is a substantive area with a paucity of knowledge (Gerrish & Lacey, 2006). The overarching research gap described in Section 1.2 points to the need for more knowledge concerning the influences on pro-conservation attitudes and behaviour; the relationships between local communities and protected area management; and how to integrate conservation and human wellbeing. Hence the substantive field of communities and conservation has room for new theories. More detail on the specific type of theory produced in this research is provided at the end of this section.

**Other aspects of this research align with variants of grounded theory, namely constructivist grounded theory and Straussian grounded theory.** These are the use of open coding and the acknowledgement that the researcher can influence the research process. Furthermore, at the research proposal stage, a preliminary literature review was done. This is explained later in this section.

In qualitative research, **theory can play the following roles: provide a broad explanation of the research topic (deductive strategy)**; be a theoretical lens (or specific theory) that shapes research from start to finish; be **generated as the end point of the research (inductive strategy)** (Creswell, 2014); or one can come to the research with no theory that may influence the process (Glaser & Strauss, 1967). This research made use of the two roles in bold, which are discussed next. Saunders *et al.* (2009:490), when discussing the inductive approach, state that it is likely "that this approach will combine some elements of the deductive approach as you seek to develop a theoretical position and then test its applicability through subsequent data collection and analysis". Hence, while the core of this research was inductive, it did comprise deductive elements.

Regarding **theory to provide a broad explanation (deductive strategy)**, reading related literature (theory) helps to provide broad themes and explanations (multiple lenses), as long as it does not hamper creativity or force preconceived categories into the study design (Creswell, 2014; Mills, Bonner & Francis, 2006; Strauss & Corbin, 1990; Thornberg & Charmaz, 2014). This aligns with constructivist grounded theorists. As explained in Section 2.1, an initial review guided the development of the research gaps, aim and objectives, as well as the research instrument. This review included subject-based literature as well as literature on more 'alternative' knowledge-generating approaches such as the books 'World Café' (Brown & Isaacs, 2005) and 'Future Search' (Weisbord & Janoff, 2000). It was completed in January 2015 and then set aside. Over the next three and a half years the fieldwork was conducted. After data collection at each case study site, the researcher consulted secondary data related to the history, structure, context and background of each case study (the nature reserve and its closest local community). These sources included academic journal articles; archival records; newspaper and magazine articles; books; conference proceedings; brochures; development plans; census data; honours and masters studies; personal communication with key sources; and several websites containing information on the reserve or accommodation, the local municipality and the relevant tourism authority. This background to the reserve and community can be found at the start of each case study. Only after theory construction in Chapter 8, did the researcher return to the literature review. At this point, newer literature was consulted. To differentiate this from the review done in 2015, newer research was added to Chapter 2 in a blue font. This is another application of the pragmatic paradigm. The researcher then returned to Chapters 7 and 8, and compared both the original and more recent literature to the main findings of this research.

In terms of **generation of theory as an output (inductive strategy)**, grounded theory aims to construct theory that is grounded in information from participants (Strauss & Corbin, 1990) and derived from the 'real world' using case studies (Coles *et al.,* 2013). Creswell (2014) refers to an inductive process of building from the data to broader themes and to a generalised model or theory; while Lincoln and Guba (1985) refer to pattern theories or generalisations which are interconnected thoughts or parts linked to a whole. This theory is usually the conclusion to the study (Strauss & Corbin, 1990).

The theory can be presented as a logic diagram, spatial network or explanatory framework that explains the data (a visual representation of the relationships between key concepts) (Creswell, 2014; Grbich, 2007; Kelle, 2014). Grbich (2007) further differentiates between levels of theory, namely micro (identification of concepts); middle range (combining concepts with variables and propositions to explain a particular focus in a discipline); and grand theories (combining concepts, propositions and statements to form an abstract overview which can be applied to a range of disciplines). In grounded theory, two levels of theory can be developed: substantive theory (relates to a particular focus or field, for example, learning styles in schools) and formal theory (develops out of the former and focuses on further development of broader explanatory concepts that can be linked to similar situations) (Grbich, 2007). Through a progressive process of data reduction, the researcher navigated towards a set of broader themes and a theory (Creswell, 2014; Lune & Berg, 2017). **This research resulted in a middle-range substantive theory that was presented in the form of a diagram.** The substantive area is communities and conservation, and it is middle-range because it combines different concepts to focus on the influences on pro-conservation attitudes and behaviours in communities bordering protected areas. As specified by Strauss and Corbin (1990), a theory specifies the conditions that give rise to (influence) the phenomena under study (the relationship between communities and protected areas, with specific focus on pro-conservation attitudes and behaviour) and the resulting consequences (whether or not a win-win can be achieved for both people and parks). Furthermore, as prescribed by Lincoln and Guba (1985) and Merriam and Grenier (2019), the interconnections/relationships between the parts/categories of the theory are also presented within the diagram. The theory is entirely data-derived and fulfils Research Objective 7.1. Further detail on the theory, and the theory itself can be found in Section 8.2.

### 3.4.4 Multiple research methods

Multiple methods within qualitative studies have received less attention than in the quantitative realm. Several options are available to the qualitative researcher, such as participant observation; individual and focus group interviews (in-depth, structured or unstructured); group discussions; field and case notes; existing data sets; documents and research papers; audio-visual information; interpretations of pictures, photos and videos; and mapping (Bohnsack, 2014; Darbyshire, MacDougall & Schiller, 2005; Rapley, 2014; Schurink, 2003; Yin, 2009). Yet the discussions are not taken further, particularly in terms of offering guidance on how to analyse multiple methods and reduce the data. In this sense, the researcher felt she was forging her own way, as determined by the most pragmatic approach.

Cohen *et al.* (2011) call for eclecticism and fitness for purpose in qualitative data collection. With grounded theory not being prescriptive in terms of data collection methods (Thornberg & Charmaz, 2014), the researcher chose multiple qualitative methods within two constituencies for the following reasons:

- To reduce vulnerability (multiple methods are less vulnerable than a single method), reduce the bias that could come with a single method, and to decrease the influence of the researcher (Cohen *et al.*, 2011; MacQueen & Namey, 2012).
- To view the phenomena from different perspectives (Cohen *et al.*, 2011; Grbich, 2007) to achieve a more complete understanding of the research objectives (Creswell, 2014), their richness and complexity (Cohen *et al.*, 2011).
- To aid triangulation, better evaluate the trustworthiness of the research findings (Saunders *et al.*, 2009; Voss *et al*., 2002) and to verify/corroborate the findings (Roulston, 2014; Saunders *et al*., 2009).
- To provide a wealth of data, so that unanticipated findings may emerge (Saunders *et al*., 2009).
- To make comparisons (MacQueen & Namey, 2012; Miles & Huberman, 1994).

The specific data collection methods are outlined later in Section 3.5.3.

## 3.5 Data collection

### 3.5.1 Research instrument

#### *3.5.1.1. Development of the research instrument*

Before developing the research instrument, the researcher consulted existing literature, which investigated the research question from different angles (Sections 2.1 and 3.4.3). Table 3.1 provides the questions asked in the research instrument. The researcher asked C1 and C2 participants questions on the same topic. C1 were asked to reflect on their personal opinions, while C2, who all had experience working with this community, were asked what they perceived the community's responses to these issues would be. Since C2 participants worked with the reserve **and** community, they were in an ideal position to provide opinions on how they thought C1 perceived these matters. C1 and C2 are both crucial role-players in the people-parks relationship, and the pragmatic stance determined that the research would be incomplete without the perspective of the parks. Some questions, not relevant to C2, were only put to C1.

Although multiple methods were used to gather data and questions were worded slightly differently for each constituency, the researcher refers to a single 'research instrument' as well as to the 'interview schedule'. For each question, Table 3.1 includes the: question number and which constituency was asked; question; method; literature source or origin of the idea; rationale; and related research objective.

The **key to Table 3.1** is set out below:

C: Constituency
C1: Constituency 1
C2: Constituency 2
FGI: Focus Group Interview
NGT: Nominal Grouping Technique
II: Individual Interview
Nr: Question number as it appears in Chapters 4, 5 and 6.
Q: Question
RO: Research Objective

Regarding the **question numbering**, the first number refers to the order of the question for C1, and the second number refers to the order of the question for C2. For example, 'Q2-1' means that it was question number 2 for C1, but question number 1 for C2. Three questions were put to C1 only, and these therefore only have one number, namely, 'Q1', 'Q5' and 'Q6'.

#### *3.5.1.2 Pilot study*

The pilot study consisted of four phases, which are outlined below in Points 'a', 'b', 'c' and 'd':

##### *(a) Testing IQA/NGT at Phinda Game Reserve/Mduku community*

The researcher accompanied another PhD student to Phinda Game reserve from 1–4 October 2015 to assist him, as he wanted to use the initial stages of Interactive Qualitative Analysis (IQA) (developed by Northcutt & McCoy, 2004) within the Makhasa/Mduku community outside Phinda. Though IQA differs in some respects from Nominal Grouping Technique (NGT), which is a method used in the present study, this proved to be a valuable trial-run for NGT. NGT is explained fully in Section 3.5.3.1.

The session took place in the community hall. The plan was to attempt the first three steps of IQA which are: brainstorming and generation of cards; clarification of cards; and clustering of cards into categories and awarding category titles. The twenty participants self-divided into four groups. For each issue statement, participants were asked to silently brainstorm and then generate ideas (each one on a separate paper). In their small groups they could then discuss/clarify ideas, and then stick the papers on a large sheet on the wall. The whole group then organised and labelled the categories. Usually one or two members of the community took the lead, but they did aim for group consensus.

Table 3.1: Questions in research instrument, data gathering method, source, rationale and link to research objective

| Nr/C | Question | Method | Source | Rationale | RO |
|---|---|---|---|---|---|
| **Q1** **C1** | What do you know about this nature reserve? What is inside this reserve? What can you do in there? | FGI | Saufi *et al.* (2014) started each interview with a general question to determine the participant's knowledge of tourists and tourism. This question thus aims to establish existing knowledge. | To ascertain the knowledge of local people regarding the reserve. In addition, the question is not contentious, and a good one to set participants at ease at the start. | 2 |
| **Q2-1** **C1** | Tell me about the relationship between you and the nature reserve. How do you feel about living near the reserve? | FGI | This question was shaped by Kideghesho *et al.* (2007:2219) who asked "How do you rate your relationship with the protected area close to your village?" and Infield and Namara's (2001:51) question of "What are your feelings about Lake Mburo National Park?". | To seek to understand the relationship between the local community and the protected area. This general question aimed to provide an overall view, getting participants to articulate the first thoughts that came to mind. | 3 |
| **C2** | *Tell me about your perceptions of the relationship between the local community and the nature reserve.* | II | | | |
| **Q3-2** **C1** | How has the nature reserve changed the way you live (positive and negative)? How have things changed? | FGI | The question was influenced by Mehta and Heinen (2001:170, 171) who asked "If you like this conservation area, why do you like it?" and "If you dislike this conservation area, why do you dislike it?"; as well as Campbell *et al.* (2007) who inquired about the 'best' and 'worst' things regarding the community-based conservation programme. Stronza and Gordillo (2008: 455, 458), in focus groups of 10-12, asked "How has the community changed since the ecotourism lodge opened?", and then classed these changes as benefits or costs. | The dual achievement of biodiversity conservation and livelihood production by these rural communities could be facilitated if individuals think and act positively towards the environment. There was some overlap between Q3-2 and Q8-6/9-7, but the search for other factors besides benefits and costs that influence attitudes and behaviour did yield new insights. The use of differing methodologies for Q3-2 and Q8-6/9-7 sought to go deep rather than wide – an approach advised by two professors who were experienced qualitative researchers. | 4 |
| **C2** | *How do you think the nature reserve has changed the way the local community lives (positive and negative)? How have things changed?* | II | | | |
| **Q4-3** **C1** | Some people like this nature reserve and the animals. Some people think there are better ways to use this land. What would make you more positive towards the reserve being here over the next 100 years, that is, down to the time of your great-grandchildren? | FGI | In 'The World Café', by Brown and Isaacs (2005:81, 82), they framed positive and energising questions for their World Café sessions which fostered creative collaborative dialogue. Their question, "How could the school be better?" gave the author the idea for this question. | To determine what aspects, if put in place, would make local people more positive towards a conservation area. | 6 |
| **C2** | *What do you think would make the local community more positive towards the nature reserve being conserved in the future?* | II | | | |
| **Q5** **C1** | What do your friends and family think about this nature reserve? | FGI | Since it is possible that participants may think similarly, the researcher asked this question to gain a wider understanding of the attitudes of others. The idea originated from a question by Brown and Isaacs (2005:173): "What would someone who had a very different set of beliefs than we do say about this situation?" | This question aimed to deepen understanding of the relationship between C1 and C2. If people were hesitant to voice certain opinions, they might feel more comfortable expressing these as 'someone else's opinion'. In addition, some ideas and thoughts may indeed come from others and enrich understanding. | 3 |
| **Q6** **C1** | Who of you have been into the reserve? What do you go in for? What did you think of your experience? | FGI | The first part was the researcher's own idea – to ascertain use and awareness of the reserve. Regarding feelings on the experience, in Gadd's (2005) study, local people reported an aesthetic benefit – they enjoyed watching elephants. She concluded that local aesthetic values are essential for conservation efforts, and that local people's motivation to conserve cannot be based purely on financial motives (would be disastrous if tourism declines or donors withdraw). The idea also partly originated from the testing of focus group questions with locals living in Dinokeng (Section 3.5.1.2). They clearly enjoyed living within Dinokeng, and appreciated the wildlife, fresh air and sense of peace. Hence the researcher wanted to determine if an intrinsic appreciation of the reserves exists, and the feelings this evokes. | Q1 and mapping helped to explore the knowledge of local people regarding the reserve. Q6 moved beyond knowledge to explore actual use, enjoyment and experience of the nature reserve by C1 participants. | 2 |

| Nr/C | Question | Method | Source | Rationale | RO |
|---|---|---|---|---|---|
| **Q7-5**<br>**C1** | Do you have any responsibilities for this nature reserve? If you do, how do you feel about these? | FGI | Section 2.6 explains that few authors mention responsibility as an influence on pro-conservation attitudes and behaviours. Two models on general pro-environmental behaviour mention responsibility or 'locus of control' (Kollmuss & Agyeman (2002). Focusing on pro-conservation behaviour in the context of rural communities and protected areas, Nsabimana and Spencer (2013) and Rodríguez-Izquierdo *et al.* (2010) hint at the role and importance of local people taking responsibility. | The study aimed to culminate in a theory, recommendations and framework that identified the influences on pro-conservation attitudes and behaviour. For comprehensive understanding, the topic needed to be approached from a variety of angles. This question explored the influence of responsibility. With the dearth of literature in this regard, it was important to explore. | 5 |
| **C2** | *Do the local community have any responsibilities for/ towards this nature reserve? If they do, how do you think they feel about these?* | II | | | |
| **Q8-6**<br>**C1** | What are the benefits of having this nature reserve near to your home? Which of those benefits are most important to you, which are least important? | NGT | Infield and Namara (2001) and Allendorf *et al.* (2006) questioned community members around Lake Mburo National Park, Uganda, regarding benefits of living near the park. Similarly Gadd (2005), whose Kenyan study focused on elephants, asked respondents to name the benefits of living near/with elephants, as well as the benefits attributed to the national wildlife authority and the presence of tourism. The idea to rank the benefits came from an expert who said it had not yet been done (Section 3.5.3.1, Point 'c'). The only study where something similar was found was De los Angeles Somarriba-Chang and Gunnarsdotter (2012) who asked participants to rank benefits and threats in order of importance using a range on a likert-scale. In this thesis, using NGT provided a means to rank benefits. | To identify the benefits that could influence pro-conservation attitudes and behaviour. | 4 |
| **C2** | *What are the benefits to the local community of living near this nature reserve? Which of those benefits do you think are most important to them? Which are the least important?* | II | | | |
| **Q9-7**<br>**C1** | What are the losses (costs/negatives) of having this nature reserve near to your home? Which of those losses impact the most on you? Which ones impact the least? | NGT | Allendorf *et al.* (2006:347 asked participants "What are the problems the protected area causes you?"; while Gadd (2005) requested locals to name the problems (which this researcher terms 'losses/costs') of living near/with elephants. To be consistent with the question above, and to improve understanding on losses, and not only benefits, ranking was again done via NGT. | To identify the losses/costs that could influence pro-conservation attitudes and behaviour. As pointed out in Sections 1.2 and 2.7.2, existing research has focused more on benefits and less on losses/costs. | 4 |
| **C2** | *What are the losses (costs/negatives) to the local community due to living near this nature reserve? Which of those losses/costs do you think impact the most on them? Which ones impact the least?* | II | | | |
| **Q10-8**<br>**C1** | For you, living near this nature reserve, what is your ideal future for your community? What is your dream situation? | FGI | In 'Future Search', Weisbord and Janoff (2000) use a complex methodology involving several steps, aiming at understanding the future desired by participants. The present researcher adapted the approach to be suitable for rural research. The question was also inspired by Nyaupane and Poudel (2011) who used Appreciative Inquiry with community members and other stakeholders. The 'dream phase' is part of Appreciative Inquiry, and they asked participants to co-create a shared vision of their preferred future. | To assist in understanding what influences attitudes/behaviour, this question aimed to step outside of pre-defined boxes (such as benefits, losses and other factors) to see if answers would deepen understanding of what communities really want, and what can therefore be done in future to improve positivity towards protected areas. It is helpful to understand the ideal scenario for C1 (and C2) so that protected area managers can see to what extent they can work towards these, as a means to improve relationships, and safeguard the future of these protected areas. | 6 |
| **C2** | *For this local community, living near this nature reserve, do you have any ideas on what could be an ideal future for them?* | II | | | |
| **QDraw-ings**<br>**C1** | In a group, draw a map of the reserve and your community. | | The researcher found no formal methodology texts mentioning the use of drawings or mapping with adults. However, in 'Future Search' (Weisbord & Janoff, 2000), participants generated a mind map, while in 'The World Café (Brown & Isaacs, 2005), participants jotted down/sketched ideas on paper table cloths. The researcher decided to ask this question, and participants could complete the task in the manner of their choice. | To ascertain the awareness of local people regarding the reserve and their community, and to see how these differed. | 2 |

Roulston (2014:307) contends that these sort of interactions at the pilot stage are very valuable in guiding the research design. From this stage of the pilot, the researcher learnt that using the first steps of IQA was workable. Since these first steps are very similar to NGT, which is less complex than IQA, the researcher adopted NGT. The following lessons were learnt, resulting in adaptions that were made for the present study:

- In this rural community of Makhasa, the IQA exercise was quite challenging, but participants became accustomed to the process. An adaption for the present research was to ask direct questions rather than issue statements, and to allow time for participants to understand the question and ask for clarity.
- At Makhasa, having them discuss and clarify notes/ideas as a group before sticking them up did not appear to achieve anything and considerably lengthened the process. In the current study, participants were therefore not divided into groups, but generated ideas and pasted them up straight away.
- While the idea was to generate ideas as individuals, some participants found it helpful to first discuss with a fellow participant, or have a fellow participant write for them. While at Makhasa the researchers tried to discourage this, in the present study it was allowed.
- With IQA, the entire group is supposed to categorise the ideas. This proved complex at Makhasa, with little being achieved as 20 people clustered around the notes. The researchers immediately adapted the approach and asked for two volunteers to order the ideas into categories and then seek group consensus on the categories. This approach was followed in the current study. Voting on the level of importance of each category followed.
- IQA was demanding and time-consuming for participants. For this study, the researcher therefore decided to limit the use of an IQA/NGT approach to questions for which categories and their level of importance were required. She adopted multiple methods, each chosen for their suitability to particular questions, and taking into consideration the demands on participants.
- The informed consent at Makhasa was too long. It took approximately half an hour for participants to go through it. They scrutinized it and it seemed to create suspicion. The informed consent used in this study was therefore shortened to a one-pager, and this worked better.
- After the Makhasa session, clarification on some notes written in Zulu had to be sought from a staff member at Phinda. The researcher realised the importance of clarification at the session while participants were still present. For her study, at each case study site, she therefore employed local translators who were highly literate, and could translate immediately, so that if necessary, notes could be clarified before participants left.

### *(b) Finalisation of research instrument*

At this stage the research instrument was checked by the two supervisors (subject specialists in environmental management and tourism respectively) and two professors proficient in qualitative analysis. Adaptations were then made based on this feedback.

### *(c) Testing the focus group questions for C1*

The initial plan was for Dinokeng Game Reserve and Kekana Gardens community to form the formal pilot for this study. However, the researcher wanted to first test the clarity of the questions for C1. A pre-pilot was therefore done on 3 December 2015 in the form of individual interviews with four participants living on two farms within Dinokeng Game Reserve. This was invaluable in terms of what additional questions needed to be asked, and how questions could be asked in a better way. Further changes to the research instrument were then made.

### *(d) Formal pilot: Dinokeng Game Reserve/Kekana Gardens community*

In qualitative studies a pilot study is not officially required (Holloway, 1997; Pritchard & Whiting, 2012; Sampson, 2004). However, due to the complexity of rural and peri-urban research, language issues and the problem of participants possibly saying what they think the researcher would like to hear, it was decided to conduct a pilot. The researcher was open to the possibility that, due to the steps undertaken above (a, b and c), the Dinokeng pilot might proceed so well that it could form one of the official case studies for this research. A qualitative study lends itself to such flexibility, for example, Gubrium and Holstein (2014) discuss an ethnographic study where an urban nursing home was used as the pilot, but eventually morphed into being the entire focus of the study.

The pilot study was undertaken on 4–5 December 2015 at Dinokeng Game Reserve in Gauteng to test the research instrument to determine its effectiveness in data collection, its practicality and whether it informed the research problem. The logistics proceeded well. For C1, participants were able to answer the questions, and the variety aided triangulation. The focus group worked well in terms of participants self-dividing into two groups and having one group in the focus group interview while the other group drew their map (explained later in Section 3.5.3.1). NGT worked very well with participants generating many ideas, ordering these and also enjoying it. Clarification, if spelling or meaning on a note was unclear, or if it was written in the local language (Northern Sotho), was done straightaway with the translator's help. Some participants responded in Northern Sotho to the focus group interview questions, and the translator relayed these for the researcher. This also ran smoothly. Furthermore, no problems were experienced in the individual interviews with C2.

So as not to lose the rich case study that the pilot had become, it was incorporated as one of the case studies. The only change made was the removal of one mapping question to C1, namely: "As a group, draw your interpretation of your relationship with this protected area". This was too abstract and confusing for participants, and did not yield anything different from the information obtained from the

other mapping question. The removal of this did not influence results in the other case studies since it was not included in the data set to be coded and analysed.

## 3.5.2 Sampling

In qualitative research, purposive sampling is a key feature and often the norm, selecting participants or sites that will best help the researcher understand the phenomena (Cohen *et al.,* 2011; MacQueen & Namey, 2012; Miles *et al.,* 2014; Moser & Korstjens, 2018; Rapley, 2014). In addition, qualitative research, specifically interpretive research, focuses on smaller numbers of people but the data is detailed and rich (Cohen *et al.*, 2011). "Studies are not designed to be representative in terms of statistical generalisability, and they may gain little from an expanded sample size except a more cumbersome dataset" (Pope *et al*., 2000:115). In grounded theory research, the sample size is relatively immaterial, as long as the researcher has sufficient data to 'ground' the theory in the research context (Cohen *et al*., 2011). Saunders *et al.* (2009) state that purposive sampling is particularly common in case study research where samples are very small and when grounded theory is being used. The sampling for this study is therefore purposive and small-scale, the details of which are discussed next.

### *3.5.2.1 Case study sampling*

There is no specific answer regarding how many sites and participants one should have, and no ideal number of cases (Creswell, 2014; Darke *et al.,* 1998). The number of cases required to be sufficient, yet manageable, varies depending on the methods chosen and the discipline. For qualitative studies Creswell (2014) recommends four to five. Palmberger and Gingrich (2014), in their insightful chapter on comparative methods in qualitative research, suggest two to four cases, especially if the aim is cross-case analysis (as in this research), because of the complexity of comprehensively examining the content of each case study and then comparing them.

In this research, three case studies were used. Regarding the inclusion and exclusion criteria, as explained in Section 3.4.2, they were contrasting cases as opposed to comparable cases (Miles *et al.,* 2014). This contrast enabled the researcher to learn how very different contexts influence attitudes and behaviour, contributing to more comprehensive recommendations, theory and a framework as the key outputs. This choice also enhanced the contribution of this research as "few studies evaluate protected area-community relationships between different conservation areas and tenure regimes" (Mutanga, Muboko, & Gandiwa, 2017:2). The research did not aim to include all types of management models and ownership structures, and convenience and proximity to the researcher's residence also played a role.

Each case study involved C1 and C2 as the units of analysis. The three case studies are indicated on a map in Figure 1.1 and are set out next.

1. **Dinokeng Game Reserve (DGR) and Kekana Gardens (KG) community** (Collectively abbreviated as **DGR/KG**):
    - C1: A peri-urban community; and
    - C2: Conservancy consisting of individual landowners, some of whom offer accommodation options ranging from camping to high-end luxury lodges.
2. **Mkhambathi Nature Reserve (MNR) and Khanyayo community (K)** (Collectively abbreviated as **MNR/K**):
    - C1: A rural community; and
    - C2: Provincial reserve run by Eastern Cape Parks and Tourism Agency, offering a low number of mid-range self-catering options.
3. **Phinda Private Game Reserve (PGR) and Mnqobokazi community (M)** (Collectively abbreviated as **PGR/M**):
    - C1: A rural community; and
    - C2: Privately run by &Beyond, offering high-end tourism with several luxury fully inclusive lodges, and with Africa Foundation dealing with community involvement and beneficiation.

#### *3.5.2.2 Within-case sampling*

**Within** the case studies, the next choice was **who** should form part of the study (within-case sampling/participant sampling). This choice was driven by the research objectives, not representativeness (Miles *et al.,* 2014). It was more important to explore the phenomena in different ways with different people who had knowledge of the phenomena, than to have a large number of participants (Chinn & Kramer, 2011; Miles *et al.,* 2014; Rapley, 2014).

For both C1 and C2, non-probability purposive sampling was utilised. It was non-probable because the researcher had full knowledge that C1 and C2 do not necessarily represent the wider population (Cohen *et al.*, 2011) and not all elements had an equal chance of being selected (Finn, Elliott-White & Walton, 2000). It was purposive because between the researcher, reserve manager and a community leader, participants were invited (for a specific purpose) to form the sample based on particular criteria to which they conformed (see Points 'a' and 'b' below) (Cohen *et al.,* 2011; Coles *et al.,* 2013; Strauss & Corbin, 1990).

##### *(a) Within-case sampling: C1*

The **focus group interviews** (Q1 through to Q7-5) and **mapping** were undertaken with two focus groups. Coles *et al.* (2013) and Creswell (2014) propose six to eight participants in focus groups, and Walden (2012) advises six to 12. The researcher thus aimed for ten participants per focus group.

**Nominal Grouping Technique** (NGT) (Q8-6 and Q9-7), as well as the final question (Q10-8), were carried out with all participants together in a larger group. Creswell (2014) suggests twenty to thirty participants

for grounded theory studies. The number advocated by Northcutt and McCoy (2004) for IQA (the first steps of which are similar to NGT) is not less than 12. With ten participants per focus group, the combined group would be 20, which aligned with the above.

Permission for the research was sought from the community leader. At DGR/KG this was the leader of the block group system; at MNR/K it was the chief; and at PGR/M, the chairperson of the community trust. These leaders were provided with criteria for the C1 participants (see next paragraph). Through the open invitation of the community leader to community members who fitted these criteria, various sectors of the community were present. This process effectively led to a non-probability purposive sample. The number of participants who responded to the invitation at each case study is provided in Table 3.2. Rapley (2014) contends that pragmatic considerations relating to access to sites or hard-to-reach people, do have their place. In research in rural areas in South Africa, it is protocol to work through the community leader. Not to do so would be unethical. The reserve manager therefore approached this leader first, on behalf of the researcher. Bias that could emerge from the community leader being part of the sampling was mitigated due to him issuing an open invitation. Furthermore, at two case study sites (MNR/K and PGR/M), the complexities of rural research prevailed, and the initial group invited by the chief were not able to attend in full. This led to last minute invitations being extended to other community members in order to obtain 20 participants. This last-minute rearrangement reduced the chances of the group being deliberately selected by the leader to include individuals with certain agendas or ideas. At all three case study sites, the researcher was satisfied that the final groups comprised a balanced representation of ages, gender and positions in society.

Regarding the inclusion and exclusion criteria, the researcher or reserve manager asked the community leader to gather a group of varying ages (but above age 18); a mix of gender; and a mix of society (for example, they should not all be community leaders). It was mentioned that it would be helpful if participants understood English, but all three case studies incorporated some participants with a limited grasp of English and others who spoke only in their mother tongue, particularly in the rural case studies (MNR/K and PGR/M). Even at DGR/KG, a peri-urban location, some only spoke Northern Sotho. A translator who was from the community, was used at each case study site. In addition, for NGT, participants were always encouraged to write in their own dialect if preferred, and several did this. At PGR/M, a number of female participants felt less comfortable writing their own notes and passed their ideas on to another participant to write down. While this language barrier made the research more complex and time consuming, it had a favourable outcome because it reduced the bias that would have been present had all participants been proficient in English (as this requirement would have drawn a certain type of individual). In retrospect, the request for participants who understood English was an unreasonable requirement in rural communities.

The inclusion criteria for C1 participants were also influenced by the writings of Brown and Isaacs (2005) and Weisbord and Janoff (2000) who encourage a diverse group, stakeholder variety and many

viewpoints. They emphasise the importance of young people being participants. At every case study site, young people above the age of 18 were present at the request of the researcher. Weisbord and Janoff (2000:137) note that young people improve "the quality of dialogue" and contribute "profound … clear and refreshingly authentic" insights. Particularly at MNR/K, some young people contributed refreshing energised responses.

The research took place in what Creswell (2014) terms the natural setting – in the field at the site where participants experience their daily lives. Data was gathered at a venue convenient to participants and within walking distance (at Dinokeng Game Reserve – the boardroom at Ndlovu Gate; at Mkhambathi Nature Reserve and Phinda Game Reserve – a local primary school).

***(b) Within-case sampling: C2***

Individual interviews were used with C2. The inclusion criteria were that participants needed to be working for the reserve either in conservation or tourism. They also needed to have been involved/worked with the local community, i.e. inherent knowledge of the community was necessary. Furthermore, the interviewees had to include the reserve manager, a head conservationist and someone involved in managing tourism in the reserve. The researcher needed to talk to this group of stakeholders as they have knowledge of the benefits that exist and their distribution. They were also able to provide insight into local pro-conservation attitudes and behaviour, as seen from their perspective. The interviews thus triangulated the data from C1.

In a small reserve, selection had to be pragmatic and was via the researcher's requests and the reserve manager's advice. This also constituted non-probability purposive sampling. Participants were interviewed at the reserve itself, wherever convenient for the participant – either at the office block or at an accommodation establishment. The only exception to this was a PGR/M C2 interview which was held at a guesthouse in Pretoria while the participant was in town for a conference. The final samples for C2 are shown in Table 3.2.

At this point it is important to comment on the **different sample sizes for C1 and C2**. For C2, due to the low number of reserve staff working at these small reserves, and due to the requirement that C2 participants also needed to be involved with the local community, the population was very small. It was therefore impossible to replicate the sampling strategy used with C1 (i.e. a group of 20 plus people). Conversely, it was undesirable to have five interviews with C1 (i.e. replicating C2's methodology), as it would not have elicited the same richness that the multiple method approach used with C1 obtained. Moreover, focus group interviews were more appropriate in the African context, where discussion and joint generation of ideas is common. Also, only having five C1 participants would have rendered NGT impossible. NGT and mapping were valuable in allowing more reserved participants to 'speak' via these methods. Additionally, the C1 focus group interviews were deemed the best way to gather multiple perspectives from a number of participants simultaneously, while the individual interviews with C2

Table 3.2: Data collection and participants in each case study

| | CONSTITUENCY 1 (C1) | | | CONSTITUENCY 2 (C2) |
|---|---|---|---|---|
| | **Focus Group 1** | **Focus Group 2** | **Focus Group 1 and 2** | |
| **Data collection method** | • Focus group interview (**FGI**)<br>• Mapping | | • Nominal Grouping Technique (**NGT**)<br>• Final question via group interview | Individual Interview (**II**) |
| **CASE STUDY 1 (DGR/KG)** | | | | |
| **Number of participants** | 5 | 8 | 13 | 4 |
| **Gender of participants** | 1 F, 4 M | 5 F, 3 M | 6 F, 7 M | 3 F, 1 M |
| **Dates of data collection** | 5 December 2015 | | | 3 December 2015<br>25 August 2016 |
| **Venue/s** | DGR offices at Ndlovu Gate | | | Various, as determined by participants |
| **CASE STUDY 2 (MNR/K)** | | | | |
| **Number of participants** | 15 | 12 | 19 (8 left before NGT) | 5 |
| **Gender of participants** | 11 F, 4 M | 10 F, 2 M | 13 F, 6 M | 1 F, 4 M |
| **Dates of data collection** | 29 December 2015 | | | 27, 29 & 30 December 2015 |
| **Venue/s** | Khanyayo Primary School | | | Various, as determined by participants |
| **CASE STUDY 3 (PGR/M)** | | | | |
| **Number of participants** | 12 | 12 | 24 | 5 |
| **Gender of participants** | 7 F, 5 M | 5 F, 7 M | 12 F, 12 M | 5 M |
| **Dates of data collection** | 7 August 2017 | | | 8-9 August 2017<br>1 September 2017 |
| **Venue/s** | Nkomo Primary School | | | Various, as determined by participants |

* F=Female; M=Male

provided more depth and the opportunity for the researcher to engage with a topic for longer, and provided valuable background and historical information (Creswell, 2014). This pragmatic approach worked, as the C2 interviews yielded similar frequencies of quotes as the multiple methods used for C1, while the occasional outlier provided important information. The similar frequencies for most questions demonstrated that one constituency was not being over or under-represented.

### 3.5.3 Data collection methods

Section 3.4.4 mentioned multiple research methods as an element of the research design, whereas this section details the four primary data collection methods used. They are also indicated in Table 3.2. Figure 3.2, presented near the start of Chapter 3, schematically presents the four methods of data collection.

#### *3.5.3.1 Constituency 1 (C1)*

In line with constructivism, multiple methods encouraged participant involvement and joint construction of shared knowledge. Ideas were gleaned from Interactive Qualitative Analysis (IQA) methodology (Northcutt & McCoy, 2004); NGT (Chapple & Murphy, 1996); Future Search (Weisbord & Janoff, 2000) and World Café (Brown & Isaacs, 2005) techniques. Figure 3.4 contains photos of the multiple methods used with C1.

***(a) Focus group interviews (FGIs)***

Focus group interviews involve a small group of people, in-depth discussion (Walden, 2012) and are guided by the researcher. They are ideal: when one wants to assess feelings, opinions, beliefs and attitudes (Walden, 2012); to establish consensus or non-consensus (Barbour, 2014a; Coles *et al*., 2013); for unwrapping a topic through the lenses of participants; to obtain a wider and deeper range of responses relatively quickly (Cohen *et al.* 2011); and when the researcher wants to probe further (Walden, 2012). In this study, they were used for **Q1 through to Q7.5 (Table 3.1).**

The questions were sent to the community leader beforehand (Appendix G). The researcher explained to all the participants what the research was about. C1 participants then divided themselves into the two focus groups, with one group being given green stickers to wear and the other purple stickers. While one group had the focus group interview, the other withdrew to another venue for the mapping (Point 'b'). The groups then swapped. The mapping group could not hear the interview group's responses.

During the focus group interview, the researcher played the role of a facilitator, with assistance from the translator where necessary. Easy questions were asked first, to create a relaxed environment of rapport and support. The questions elicited responses from a variety of participants, encouraging interactive discussion, which revealed complementary and contrasting opinions. The use of two focus groups in each case study provided more opportunity for patterns to emerge.

The presence of a translator from the community also assisted in minimising the effect that the researcher could have on moulding the data, an aspect about which Barbour (2014a:318) cautions the researcher.

In each case study, both FGIs were audio-recorded and the researcher also made notes of answers, as well as particular emotions that would not be evident in a transcript.

***(b) Mapping***

In this research, mapping refers to the joint construction of a map drawing by participants. Apart from Miles *et al.* (2014), none of the research methodology texts consulted (namely Banks, 2014; Cohen *et al*., 2011; Creswell, 2014; Grbich, 2007; Saunders *et al*., 2009) mention the use of pictures or maps drawn


Figure 3.4: Multiple research methods with C1

by participants as a method of data collection. Coles *et al.* (2013), however, mention the emergence of innovative visual data such as drawings; and Darbyshire *et al.* (2005) and Miles *et al.* (2014) refer to studies where children drew maps and pictures respectively. The researcher only found one source where mapping and drawings had been used with adults, and this was in the Peruvian Amazon (Wali *et al.,* 2017). Judging by the paucity of references to drawings/mapping as a method of data collection (in both methodological texts and research articles), the effective use of mapping with adults in the rural and peri-urban context of this research, constitutes a methodological contribution.

Darbyshire *et al.* (2005), who used mapping with children in a multiple method study, argues that it provided another avenue whereby their voices could be heard. In the present study, different individuals responded differently to each of the multiple methods used. This provided opportunities for different participants to be heard, and contributed to the richness of the findings. The researcher found that mapping provided insight into: how participants viewed the reserve and their community; how much they knew of the reserve in contrast to their community; and what they knew about the reserve (for example, vegetation, animals and boundaries). Furthermore, while the maps certainly provided new data, they also confirmed data from the other methods.

Prior to commencing the focus group interview with the other group, the researcher (and translator) would explain to the mapping group that they needed to draw a map of the reserve and their community. Participants were given a flipchart page, coloured pencils, pens and crayons. No guidelines were given, as the researcher wanted to see what would emerge in their drawing without any prompts. They were free to use words, pictures or both to generate how they saw their community in relation to the nature reserve. Neither the researcher nor translator were present during the mapping exercise, which took place in a separate room or outside, away from the focus group interview. Once the first focus group interview was complete, the two groups swapped, and the other group drew their map.

***(c) Adapted Nominal Grouping Technique (NGT)***

After the focus group interviews and mapping, NGT was undertaken with both focus groups combined. NGT is a consensus method helpful in synthesising individual opinions, without the limitations of group interaction where certain individuals may dominate (Van Teijlingen, Pitchforth, Bishop & Russell, 2006). NGT was useful for **Q8-6 and Q9-7** where the researcher wanted to generate multiple answers, categorise them and then rank them via voting.

In original NGT, individuals generate ideas anonymously (each one on its own note). These are pooled, discussed, organised and finally voted on regarding level of importance (Chapple & Murphy, 1996). Based on lessons learnt during the pilot phase where IQA was tested with the Makhasa community (refer to Section 3.5.1.2, Point 'a'), the researcher adopted a simplified version, which was implemented in all three of the case studies. It differed from the original in the following ways: direct questions were asked; participants were not divided into groups and discussion of notes was omitted; anonymous idea

generation was not enforced; and the researcher asked for two volunteers (one male and one female) to order the ideas into categories and then seek group consensus.

Participants were provided with several sticky notes and asked to generate as many answers as they wished, as individuals. Answers could be a single word or sentence, in mother tongue or English. Participants then came to the front as individuals and pasted the notes on a large page. The two volunteers then played their part. At this point, meaningful discussion would ensue as participants grappled to place some of the notes in categories. Participants then named each category, tallied its notes and discussed whether they agreed with the order of priority (according to the tally). If not, this was voted on.

During note generation and ordering into categories, the researcher stood out of the way and allowed participants to work independently (Weisbord & Janoff, 2000). At no time did she move any of the notes (Weisbord & Janoff, 2000). If any assistance was required during the ordering of categories, the researcher let the translator, as a fellow community member, facilitate in mother tongue. This was to reduce the influence of the researcher as far as possible.

The researcher has not found evidence of NGT being used in rural settings, but experienced that a simplified version was highly effective in gathering data in the context of this research. It promoted confidence and enabled participants to feel safe in expressing their own realities, with some participants, who had been quiet in the focus group, finding their voice in this more alternative research method. It also allowed movement of participants which, as contended by Weisbord and Janoff (2000:157) "change[s] the shape, flow, energy and possibilities in the room". Furthermore, NGT provided a means of determining which benefits and losses are more important to the participants. This type of ranking is currently lacking in the context of communities and protected areas[2]. Although ranking only forms one component of this study, it provided an idea of which benefits/losses were most significant in each of the three communities.

After NGT, the final question (**Q10-8**) was presented to this larger group, with each participant being given a chance to voice their dream for an ideal future. This last question was also audio-recorded and the researcher again made notes.

#### *3.5.3.2 Constituency 2 (C2)*

The fourth research method was **semi-structured individual interviews (II),** conducted with C2. The questions can be found in Table 3.1. Yin (2009) views the interview as one of the most important

2. Personal communication with Dr Anna Spenceley (Chair of IUCN World Commission on Protected Areas: Tourism and Protected Areas Specialist Group) via email on 2 February 2014.

methods of gaining information from case studies, because most case studies relate to human affairs and/or behaviour. An interview does not merely gather information. It is a means to understand perceptions using a two-way process in which thoughts and ideas can be exchanged (Lune & Berg, 2017). The questions were sent in advance to the reserve manager (Appendix G) when seeking permission to conduct the research. Within each case study, the researcher used the same interview schedule, presenting similar questions to those asked of the local community (C1) (Table 3.1). The researcher ensured that all questions were answered, but the semi-structured nature allowed for digressions, expansions and further probing (Cohen *et al*., 2011). These deviations often provided valuable background information/history or complemented the data for particular questions.

Interview length ranged from 45 to 66 minutes in length. Gadd (2005), in his study in Kenya, found interviews to be the most effective way to obtain detailed individual opinions and explanations. In the present research, the interviews yielded longer quotes which provided depth and specific examples.

Some questions were not put to C2 participants as they were not relevant to them. All interviews were audio-recorded. The researcher again made notes of answers and particular emotions.

## 3.6 Data analysis and interpretation

The term 'data analysis' applies to various phases such as coding, presenting and displaying the data, and drawing conclusions (Roulston, 2014). For this study, Section 3.6 considers five sub-sections which have bearing on the analysis and interpretation undertaken, namely the use of Atlas.ti; organising and preparing the data for analysis; coding, refining and data cleaning; data presentation; and generating findings from the coded data.

### 3.6.1 Use of Atlas.ti

To support the analysis, the researcher used a Computer Assisted Data Analysis System (CAQDAS) package, namely Atlas.ti (Version 7, published by GmbH, Berlin). In the final stages of the research, Atlas.ti Version 8 was used. Atlas.ti is not a method or approach to analysis, and the software cannot do the analysis – it assists in managing data and organising analysis (Gibbs, 2014; Palmberger & Gingrich, 2014). Due to the complexity of a multi-case, multiple method study with a large hierarchical coding frame, the researcher found the programme to be invaluable in organising the data, coding, retrieving sub-sections to focus on and presenting different configurations of data during analysis.

In this research, the features of Atlas.ti that were particularly useful were the management of hundreds of documents; the transcription function where anchors were inserted at regular intervals, enabling one to return to the exact phrase/sentence under analysis in the original recording; the coding and retrieval

function (to construct, modify and maintain codes); flexibility in the analysis process due to the ease of modifying codes (for example, if one changes a code name for one text chunk, that code name is changed in all the documents where it was used); Boolean combinations of codes to draw queries of certain data; the ability to code the maps; writing comments and memos; creating network diagrams; search and retrieval of words or codes; and producing outputs such as the universal coding frame, and tables and graphs via Excel.

### 3.6.2 Organising and preparing the data for analysis

Interview recordings for **FGIs** and **IIs** were imported as primary documents into Atlas.ti for transcription. Roulston (2014:301) contends that "there are no 'right' ways to transcribe … interview data". The technique followed in this study is outlined here. Interviews were first transcribed word for word from beginning to end, including any introductory preamble. The researcher did a few transcriptions herself, but the majority were done by a company, Southern Transcription. Individual transcripts were then imported into Atlas.ti as primary documents, and names and affiliations were removed to preserve confidentiality. Actual questions were made red and bold. The researcher listened to each recording and verified it against its transcription. At this point, using the Association Editor in Atlas.ti, anchors were inserted within the audio recording, which enabled one to correspond a section of text with its corresponding audio. Hence specific quotes could be played back during coding, which increased accuracy. The red dots in the next figures are the anchors. This function also proved invaluable in analysing focus group data, as the researcher could replay the excerpt, paying attention to detail such as tone of voice and emphases, and the intensity of agreement or disagreement amongst participants (Barbour, 2014a) – aspects which are not evident from transcripts alone (although the researcher did make notes, as mentioned previously).

All notes produced during **NGT** were translated during or immediately after the session, and the translation was written onto the note. However, to ensure accuracy, all translations were double-checked with the aid of a different translator after the event. This proved to be valuable as the coding for some notes changed after the second translation check. Each note was typed up as its own primary document, and imported into Atlas.ti. Finally, each map (from **mapping**) was scanned and imported into Atlas.ti as a primary document.

A naming convention for the different types of documents was developed. For example:

- 'MK_9-7_PNG_LC_PN9' referred to Mkhambathi (MK), Q9-7, NGT method[3], local community i.e. C1, with the note being the ninth post-it note (PN) produced for that question;
- 'DK-FG2_T-LC-5.12.15' means Dinokeng (DK), Focus Group 2 (FG2), transcript (T), local community i.e. C1, on the date 5/12/2015; and

3. Within Atlas.ti, the term 'Post-it Note Gathering' (PNG) was used to name NGT notes.

- ‘DK-I2_R_C_F_27_L_3.12.15’ refers to Dinokeng (DK), Interview 2 (I2), recording, with a conservationist (C), who is a female (F), aged 27, and ‘L’ was an identifier code for the individual, followed by the date on which the interview took place.
- ‘PGR Map Green FG1 Drew 2cnd’ refers to Phinda Game Reserve (PGR), the map that was drawn by Focus Group 1 (the green group) who drew their map second (as they were first in the focus group session).

### 3.6.3 Coding, refining and data cleaning

#### *3.6.3.1 Data coding*

Coding is a key part of the analysis (Miles *et al.,* 2014) to reduce and reorganise the data into categories and/or themes. MacQueen and Namey (2012:279) refer to “a code [as] a formal rendering of a theme”, while Saunders *et al.* (2009) speak of developing categories which are attached to meaningful chunks of data. This constitutes thematic analysis, which in contrast to content analysis, is more involved. “Thematic analysis moves beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas. Codes developed for ideas or themes are then applied or linked to raw data as summary markers for later analysis, which may include comparing the relative frequencies of themes or topics within a data set, looking for code co-occurrence, or graphically displaying code relationships” (Namey, Guest, Thairu & Johnson, 2008:138). In this research, themes were the headings to a group of codes or sometimes a stand-alone code. The screenshot from the code book within Atlas.ti in Figure 3.5 shows the following as an example: ‘Lack of access to natural resources’

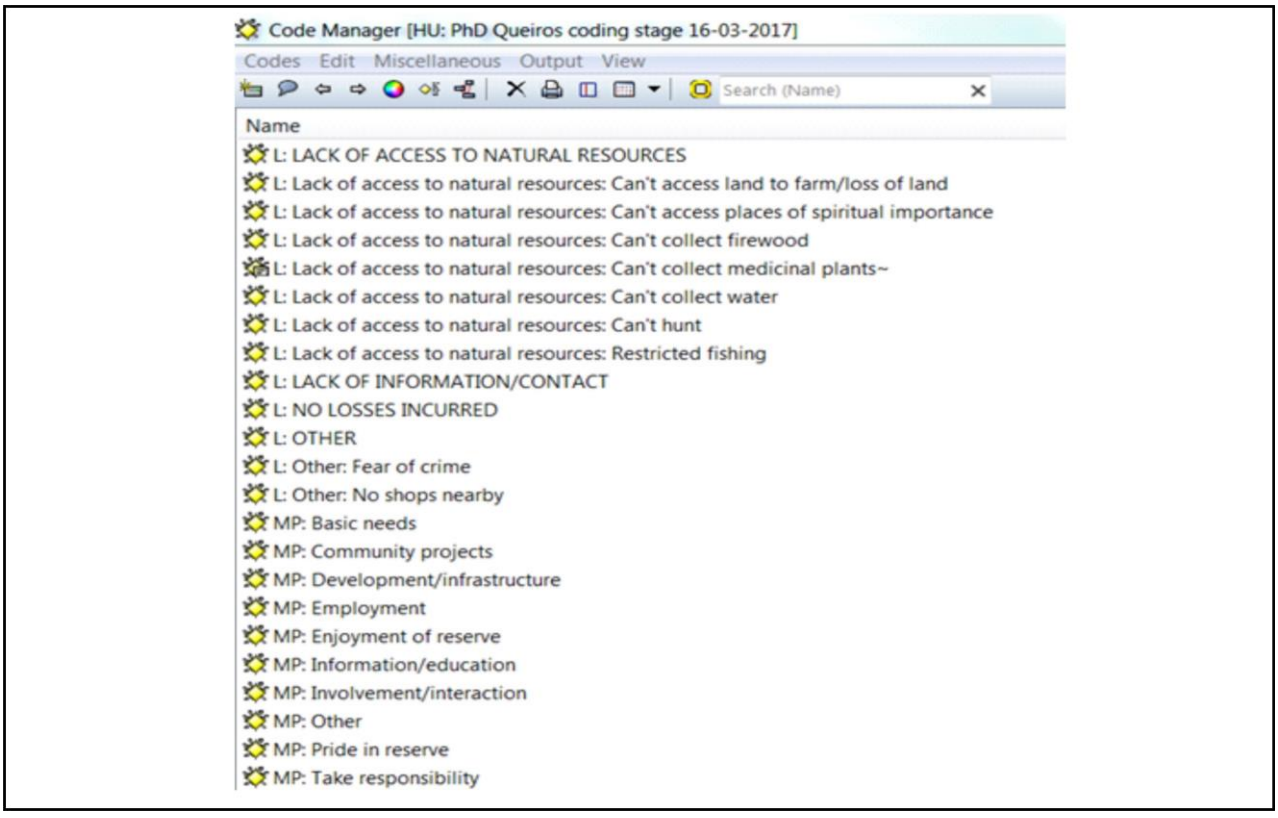



Figure 3.5: Example of codes/themes

is a theme under Q9-7 on losses (L), which has several codes within it. 'Lack of information/contact' and 'No losses incurred' are also themes as well as codes (but without sub-codes). The same applies to the themes/codes emerging under Q4-3 on what would make people more positive (MP), for example, the meeting of 'Basic needs' and 'Community projects'. At other times, in the discussion in Chapters 4, 5 and 6, a theme might emerge by bringing together various codes, which have not been structured hierarchically within the coding system. Hence, the term 'theme' is used flexibly within this thesis.

Aligning with constructivism, coding was open and inductive, meaning that codes developed purely from the data and represented the researcher's interpretation of participants' responses (Churchill & Sanders, 2007). Thus every code generated by the researcher had to fit the data (as opposed to making the data fit the code) (Thornberg & Charmaz, 2014). Descriptive coding was used, where the code label described the basic topic of the quote (Miles *et al.*, 2014). This type of coding is suitable for social environments and where a wide variety of data collection methods is used (Miles *et al*., 2014).

The transcripts for the **FGIs** and the **IIs**, as well as the **maps,** lent themselves to coding (Banks, 2014; Barbour, 2014a). For coding **NGT**, there was no previous research to benchmark against, as, if NGT is done fully (as opposed to the simplified version followed in this research), the participants themselves do the analysis (but not by coding). However, each note could be coded. It was therefore decided to use coding to chunk data segments for all four methods:

- in the textual transcripts for both **FGI** and **II** it was a sentence or a few sentences that represented a certain concept;
- within the **maps**, coding involved the chunking of sections of the drawing; and
- in **NGT** notes, the whole sentence/word would be coded (as participants produced single words or short sentences).

Using this data analysis technique, NGT data could be integrated and compared with the other data gathered. Figures 3.6 to 3.9 provide examples of coding within the different forms of data collection.

The researcher refers to these chunks of data segments as quotes. These are verbatim quotations and comprise the data in a qualitative study, proving that findings are based on what participants have said (MacQueen & Namey, 2012). Saunders *et al.* (2009:535) state that quotes are a "powerful way in which you can convey the richness of your data. It is the qualitative equivalent of tables and graphs".

The coding of an entire question first (across all transcriptions in C1 and C2), as opposed to coding an entire transcript and then moving to the next transcript, had the advantage of being able to focus better on the coding system for each particular question.

Each code had an identifier label. General information codes had the prefix of '#', for example, whether data related to C1 or C2; group composition; which reserve/case study; gender of respondent; for C2, the position of respondent at reserve; and the question number. Examples of this are shown in Figures 3.6, 3.8 and 3.9 (see text on the right-hand side). Furthermore, each question (see Table 3.1) was coded separately and hence had its own prefix. For example, all codes for the question on the relationship between the reserve and the community, started with an "R" (see Figure 3.6). Through this process of coding, a universal coding frame was created, which is provided in Appendix C. This was then applied to all forms of data collection and both constituencies.

Occasionally quotes were coded twice if relevant to different codes, for example a respondent may mention an action taken by the reserve to build better relationships, such as a youth soccer tournament, which has also reduced poaching. This would then be coded as 'R: Actions taken by reserve' and under 'R: Refs to poaching' ('Refs' standing for 'references'). Furthermore, if respondents made comments elsewhere in the transcript that were relevant to a particular question, for example, a comment made at the beginning of an interview when the researcher was obtaining their background, then the researcher coded this with the correct code to fit that comment. This ensured that valuable information elsewhere in the transcript did not get lost simply because it was not under the 'right' question/answer.

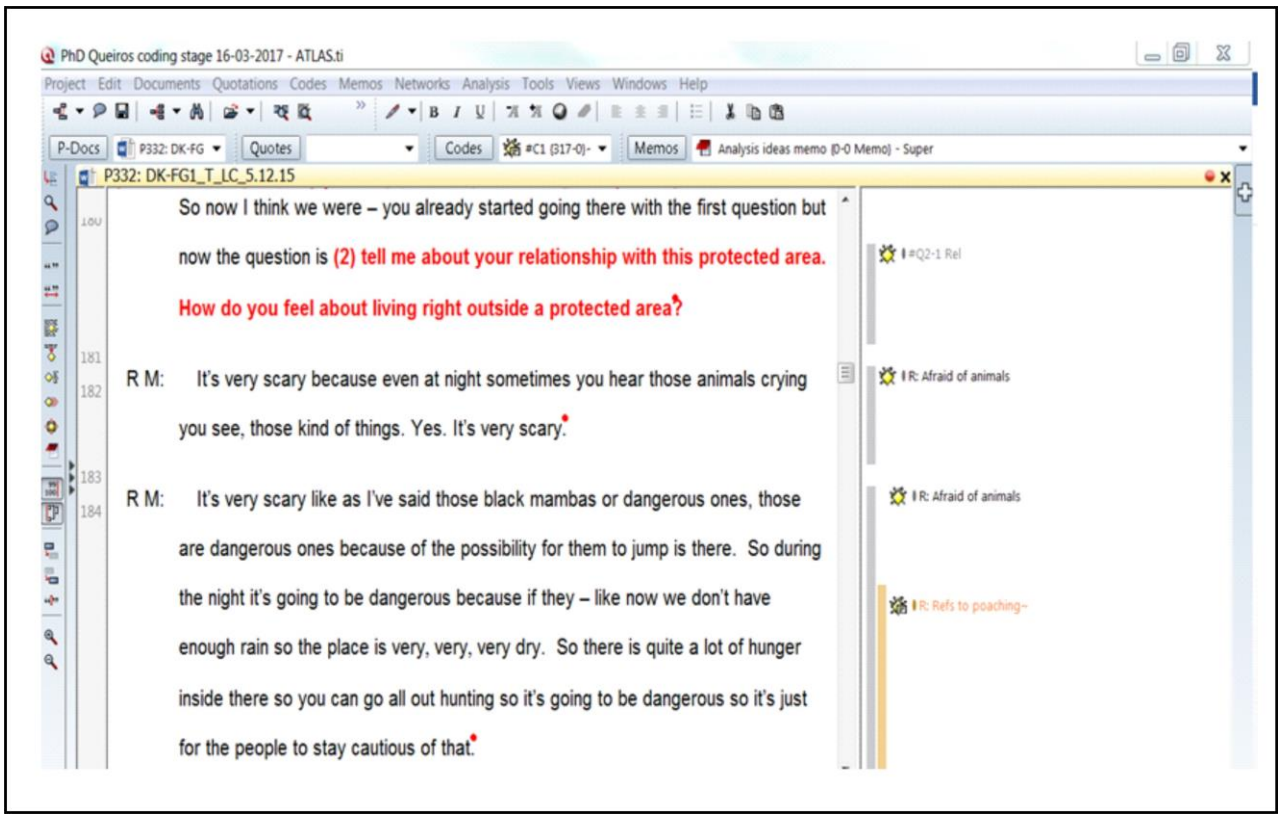



Figure 3.6: Example of coding within a C1 focus group interview transcript

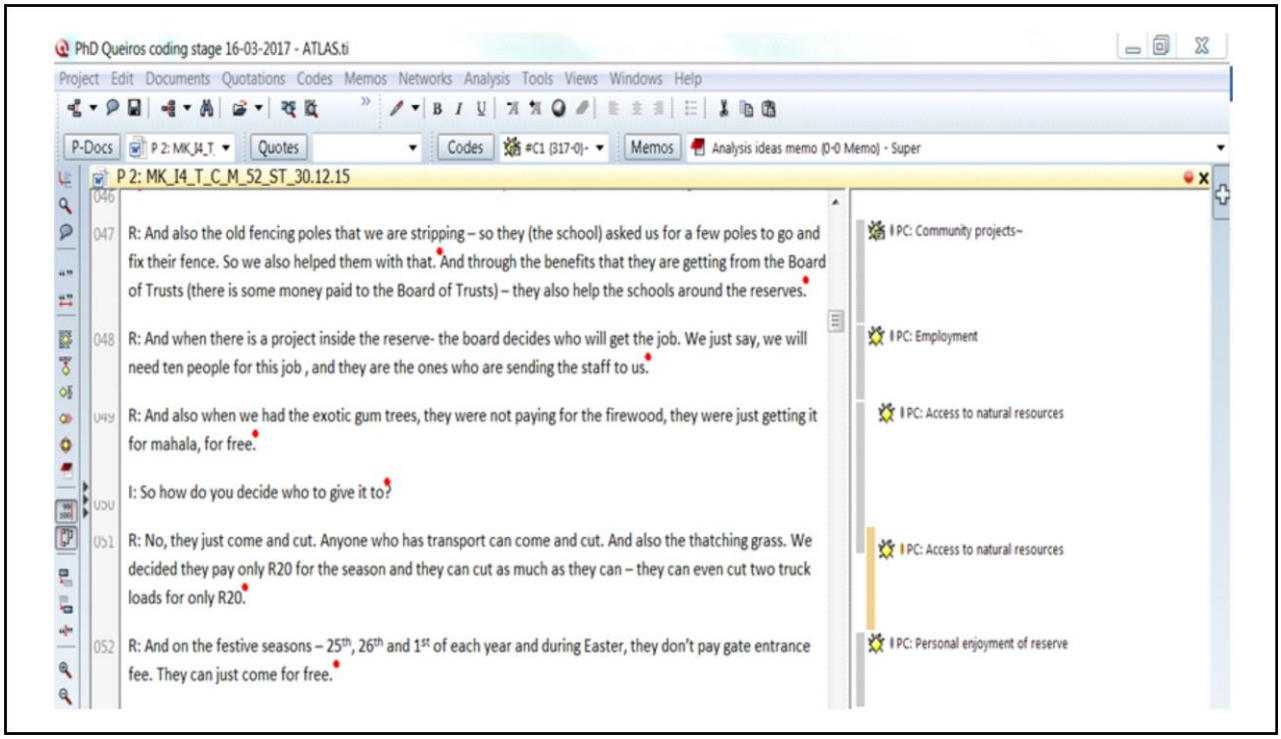
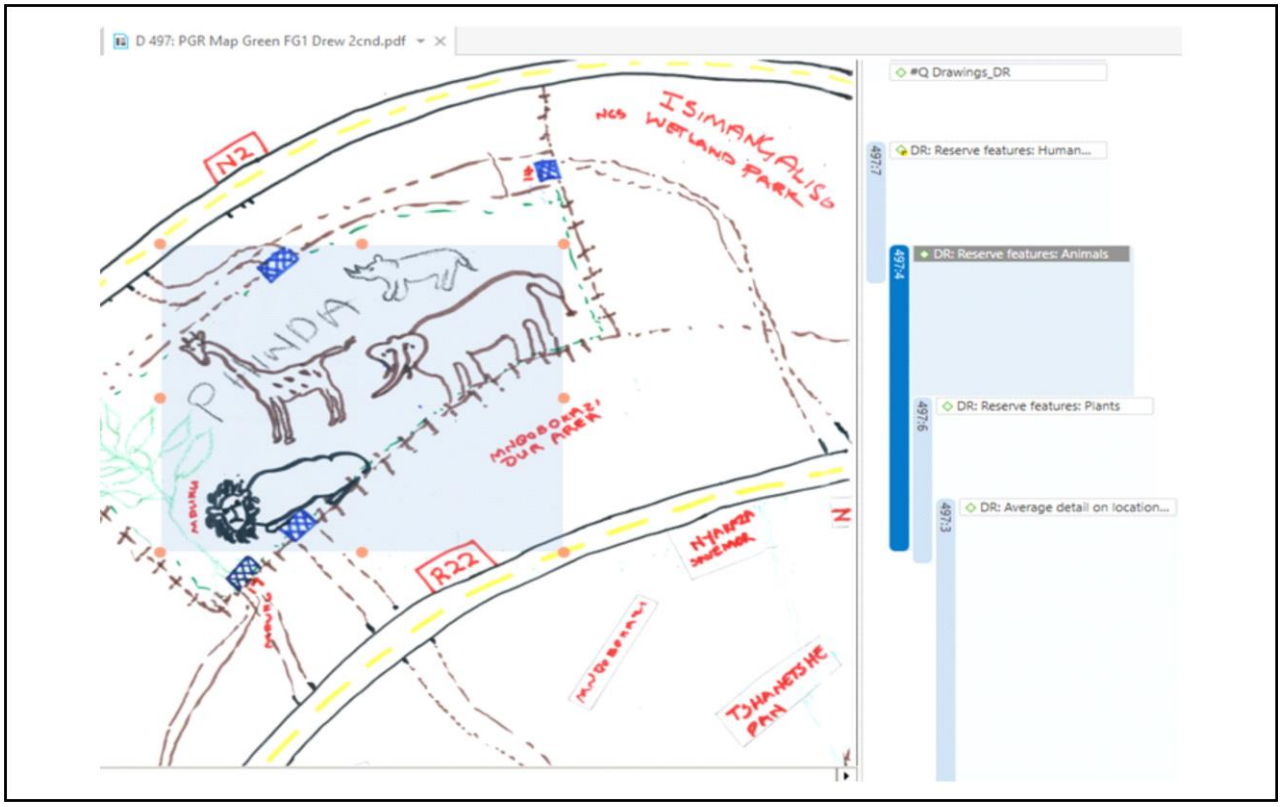
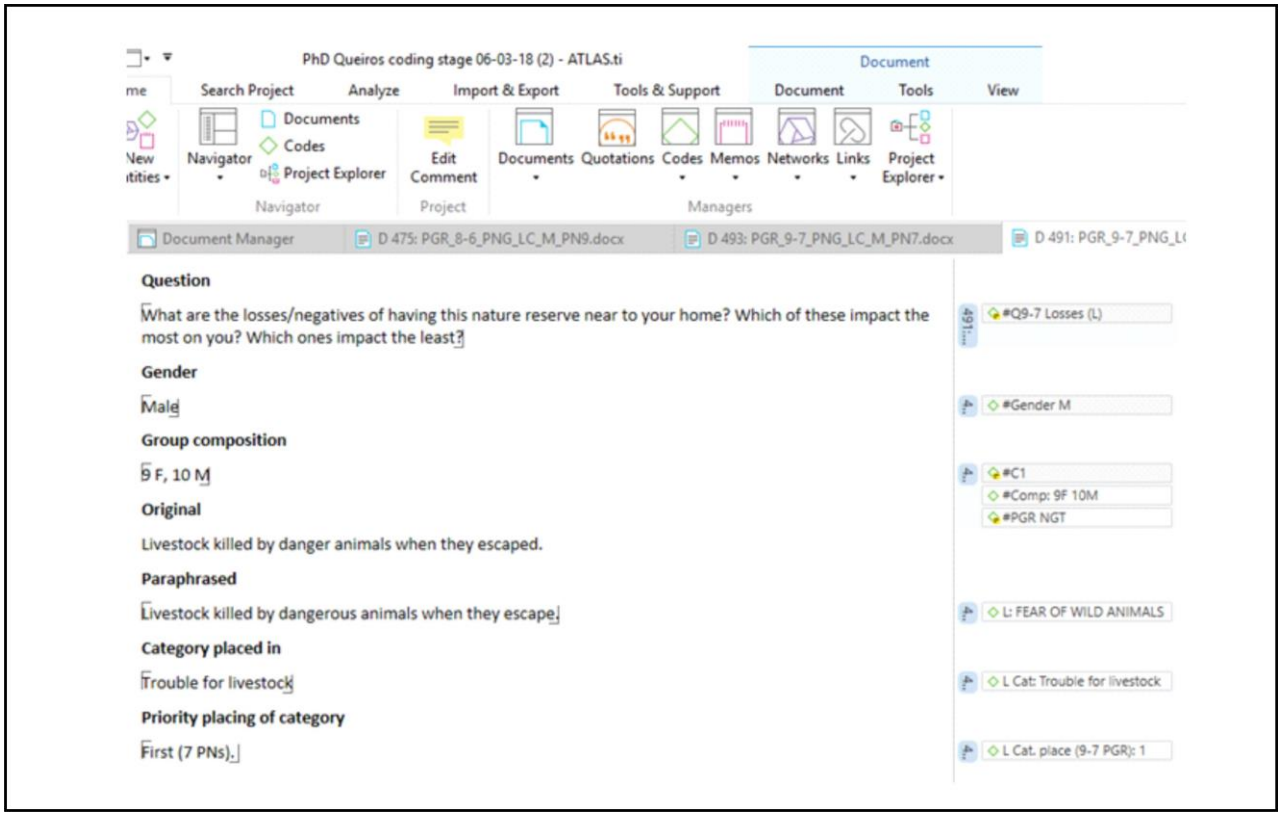



Figure 3.7: Example of coding within a C2 individual interview transcript




* The light blue block is the coded chunk (coded with 'DR: Reserve features: Animals').

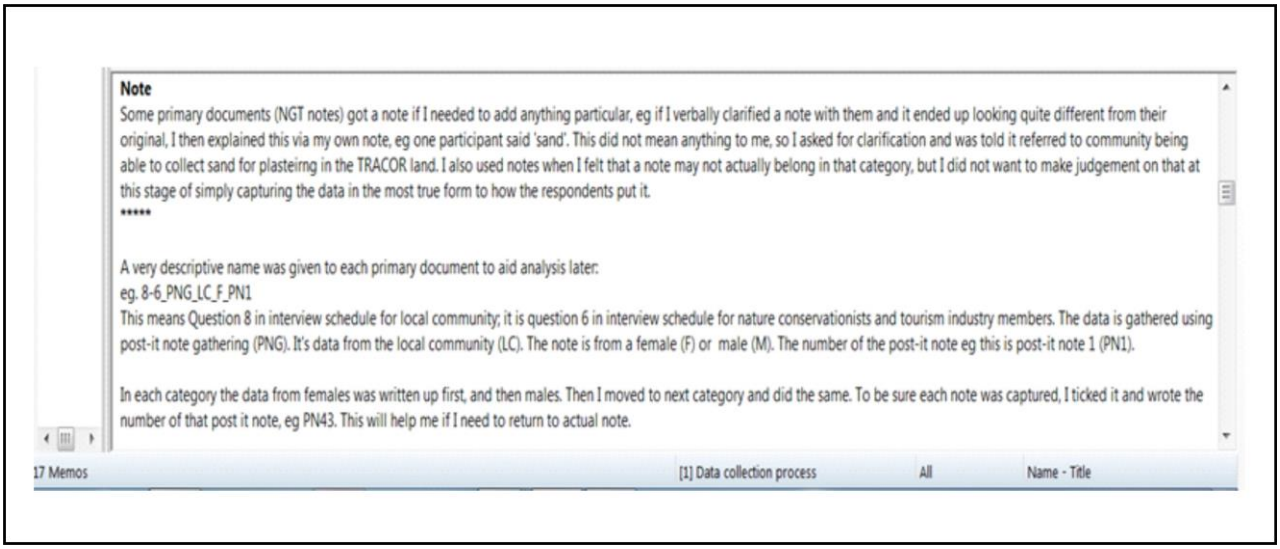
Figure 3.8: Example of coding within a map




*Gender is known because females and males were given different colour notes, but it did not yield anything significant.

Figure 3.9: Example of coding of NGT note

Tools within Atlas.ti that were used to support coding were the memo and comment tools. Memos were used to record analytic ideas; follow up questions; to document processes, etc. Figure 3.10 is an excerpt from a memo in which the researcher documented the data collection process.




*Regarding the reference to gender in the memo above, refer to the note under Figure 3.9.

Figure 3.10: Excerpt from a memo in Atlas.ti

The comment tool was used to attach comments to codes, with these comments containing working definitions of codes. These definitions reminded the researcher when a specific code could be used and when not, in order to ensure consistent and accurate coding. Figure 3.11 is an example, showing the comment (in the pop-up box) relating to the code 'R: Appreciate actions taken by reserve'.

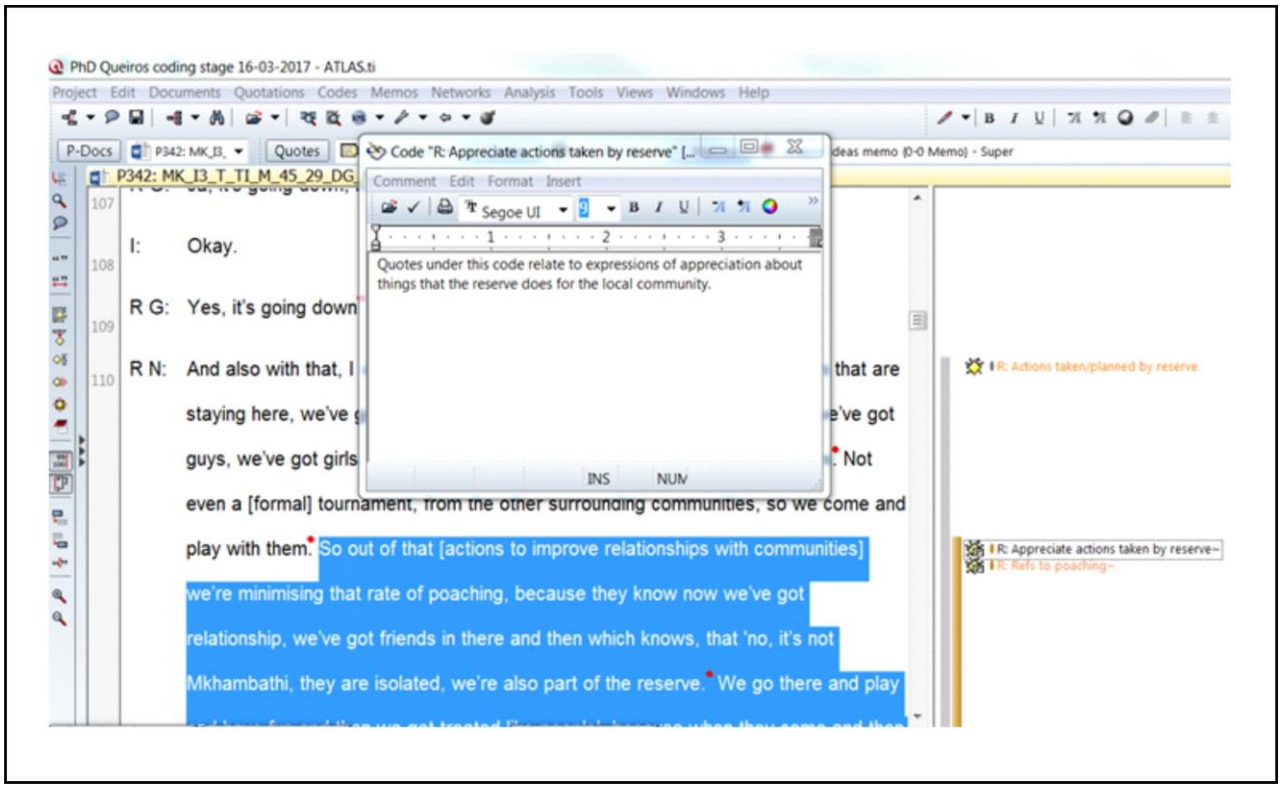



Figure 3.11: Using the comment tool in Atlas.ti to explain a code

### *3.6.3.2 Code refinement*

For quality in data analysis, codes should be interrogated and refined (Barbour, 2014b). The researcher compared data with data, codes with other codes, and data with the assigned codes (Roulston, 2014; Thornberg & Charmaz, 2014). In so doing, the coding frame was refined, integrated or sub-divided further. Some codes were merged within others, others were expanded as the process of coding revealed that a particular category needed further sub-division. In most cases, this refinement resulted in fewer codes with more quotations under each one, as opposed to more codes with fewer quotations under each. Using Atlas.ti, a code could easily be refined or deleted, or a section of text have its code changed. Hence the coding frame was adapted and extended throughout the process of coding the data from Case Study 1 through to Case Study 3.

### *3.6.3.3 Data cleaning*

After the data was coded and the coding system refined, the coding within each interview transcript (for FGIs and IIs) and within each NGT note was checked to see if data cleaning was required. Data cleaning involved several steps:

***(a) Coding rules and code definitions***

To aid consistency regarding how each question should be coded and how the data should be cleaned across all three case studies, a table was drawn up entitled 'Data cleaning process for each question and coding rules' (see Appendix D). Schreier (2014), in her work on qualitative content analysis, calls these 'decision rules', while MacQueen and Namey (2012) refer to an 'audit trail' to enhance transparency. These coding rules were used together with code definitions attached to certain codes, using the comment tool (as explained in Section 3.6.3.1).

***(b) Re-checking coding within transcripts and NGT notes***

For cleaning of the C1 FGI data, the researcher listened again to all the FGI recordings to recognise the voices of different respondents to ensure they were not coded again later regarding the same point. The II data from C2 were simpler to clean as there was only one respondent per transcript[4], hence one did not need to re-listen to check for different respondents. For each case study, the researcher read through all the transcripts again (looking at the first question for all transcripts, then the second question, etc.). This ensured that each transcript had been consistently coded. For NGT notes, the quotes were re-read to determine if the correct code had been used. This was very useful and several changes were made to coding during this phase to ensure consistency across case studies.

For the purposes of accurately identifying how many respondents mentioned a particular point (such as collecting thatch grass), it was important that certain codes were only mentioned once per person. In these cases, data cleaning entailed checking that an individual had not been coded twice with the same code, for example, a respondent might mention collection of thatch grass as a benefit for local people, and then later on within that answer on benefits, or perhaps elsewhere, mention this again. Where someone mentioned it more than once, one of the codes would be unlinked within Atlas.ti, leaving only the most useful/in-depth response. In cases where a respondent continued a particular answer a few lines down, after some small talk, an interruption or deviation to another topic, the researcher would copy the second part of the response and paste it with the rest, using an ellipsis ('...') to indicate a break in the flow. A note would be made in italics within the transcript to remind the researcher that this is what had been done. The only reason for this was to ensure the same answer was not coded twice for the same respondent. Similarly, if a respondent had explained something earlier or placed it in context,

4. The exception to this was one interview at MNR/K where two interviewees wanted to be interviewed together, but gave their own answers to each question.

and a few lines down came to the crux of the matter, but just referred to "they" or "it", then the researcher placed an explanation of the "they" or the "it" within square brackets.

For several codes, coding was not done according to one mention per person, but rather according to what was mentioned. For example, a respondent might have mentioned several examples under 'Others' positive actions (OPA)' or 'Employment opportunities'. In those cases, it was important to capture the different examples, and hence a particular code would have been used more than once for the same individual within those answers. This was also checked during data cleaning.

***(c) Re-checking adherence to coding rules using Atlas.ti***

To check adherence to the coding rules, after a question had been checked in all the transcripts, a double-check was done using Atlas.ti. By double-clicking on each code within a question (which results in all quotations associated with that code popping up in a window), the researcher could verify for unwanted duplication. The first number before each quotation denotes the document number (referring to either a transcript or NGT note). Hence if a document number appeared twice under a code where one did not want this to occur, for example, in questions on specific benefits or losses, then the researcher could return to that document and unlink one of the codes.

***(d) Drawing up quotation lists per code***

Moreover, for each question, a list of all quotes relating to all the codes for that question (regardless of the data being collected via FGI, II or NGT) was drawn from Atlas.ti. These documents were saved as 'Code query output documents'. In Atlas.ti the quotes are ordered according to the document, for example, the quote used in Primary Document 1 would appear first in the list. However, the researcher needed the quotes to be ordered per code; therefore cutting and pasting would take place to do this. All quotes would then be counted to ensure that the number stipulated in Atlas.ti was still the same (i.e. no quotes had been lost during the cutting and pasting). Once all quotes were ordered under the relevant code, the researcher checked again that all quotes had indeed been coded with the correct code. When cumulatively considering all the quotes related to a specific code, a particular quote could be found to belong better elsewhere. This quote was then moved to another more appropriate code. Quotes for each C1 focus group, the NGT exercise and each C2 interviewee were also grouped together respectively under each code, to assist analysis later, for example, all quotes mentioned by Interviewee 1 for PGR for the code 'PC: Community projects' would be listed one after the other.

It was from these documents that quotes would be analysed per code, and those quotes best encapsulating the findings were copied from there and pasted into the thesis.

***(e) Checking quotation lists against tables/graphs produced***

Once the tables had been produced from the data in Atlas.ti, the final data cleaning step was to check that the number of quotes per code in the Code query output documents corresponded with the number of quotes per code in the tables.

The researcher found this laborious cleaning process highly necessary for the integrity of the data, consistency across case studies and the level of confidence with which she could then proceed to the next stage of analysis. This process was in line with Schreier (2014) who supports an iterative process that is systematic – checking the coding, repeating steps and modifying the coding frame as one progresses.

### 3.6.4 Data presentation

In the case study chapters (Chapters 4, 5 and 6), the data are presented as follows. For Q1, Q2-1, Q3-2, Q4-3, Q5, Q6 and Q7-5, tables are used to present the codes and code frequencies. For Q8-6 and Q9-7, tables (to display level of importance of categories, and the codes and code frequencies) and network views (to display the coding frame hierarchically) are provided. Supportive verbatim quotes and the relevant discussion follow each table. For Q10-8, the individual dreams of participants are listed within a table. For each of these aforementioned questions, the tables show all the codes which emerged inductively during the coding of each question. If a particular code was not used in a particular case study, it is left out of the table. The codes are kept in the same order in each case study to aid comparison. For the mapping exercise, the actual maps are provided. The data in the cross-question analyses are presented in the form of bar graphs and a line/node graph (both of which display code frequencies) and a word cloud. The latter is a helpful visual depiction to establish broad patterns, but must be combined with more sophisticated methods (Barbour, 2014b), as done in this study. Finally, the two summaries are presented in tabular and diagrammatic form respectively.

Within the cross-case analysis (Chapter 7), data are presented using bar graphs (to depict code frequencies across all three case studies) and tables (which display benefits and losses in descending order of importance) as well as a table which contains a colour-coded summary of the meta-themes determined during cross-case analysis. In Chapter 8, data are displayed in the form of a diagrammatic theory and a framework.

### 3.6.5 Generating findings from the coded data

In total, across all three case studies, 64 C1 participants and 14 C2 participants were involved. The focus group and individual interviews resulted in 17 hours, 46 minutes of recordings which became 645 pages of transcripts. Apart from the transcripts, six maps were produced which were coded. In addition, 192 notes were produced during NGT which were also coded. Within the transcripts and notes, 1 217 quotes

were coded and then needed to be analysed and interpreted. The data are thus too extensive to be put in an appendix.

In line with pragmatism, "there is no one single or correct way to analyse and present qualitative data; how one does it should abide by the issue of fitness for purpose" (Cohen *et al.*, 2011:537). In fact, Myers (2020:19) writes that "there are literally dozens of ways to analyse qualitative data". The analysis plan decided on to analyse and reduce the above-mentioned data to achieve the research purposes is set out in this section. In this regard, Namey *et al*. (2008:139) state that "data reduction is … a form of analysis that sharpens, sorts, focuses, discards and organises data in such a way that 'final' conclusions can be drawn and verified". Similarly, Saunders *et al*. (2009) refer to recognising relationships, and ultimately drawing conclusions.

This process of generating findings is in line with what Cohen *et al.* (2011) refer to as 'multilayered' analysis, with data being analysed at different levels. Analysing at different levels resulted in rich thick descriptions, which is a tenet of qualitative research (Cohen *et al*., 201). In this research, **four layers of analysis and interpretation** were realised in order to reduce the data and arrive at the ultimate conclusions to address the research objectives. Figure 1.3 (Chapter 1) places these four layers within the overall research process, while Figure 3.2 (near the start of this chapter) views these layers in the context of the research design: a comparative multiple method qualitative approach used in three case studies and resulting in a grounded theory. Figure 3.2 displays each case study as two overlapping circles which represent C1 and C2 respectively. The diagram also shows how these three case studies are compared and that this leads on to the main contributions/outputs of this research. This section discusses each layer of analysis and interpretation in turn.

In addition to the above, Figure 1.3 also depicts the **four stages where the findings of this study were compared with existing literature** during the various layers of analysis and interpretation. These are mentioned in this section at the point where they were conducted. Furthermore, for the reader interested in replicability, the specific analysis tools used for each question are explained in Appendix E.

#### *3.6.5.1 Within each case study: Analysis and interpretation layer 1*

The case study chapters form the **first layer of analysis and interpretation**. Within each case study, there were four components in the analysis and interpretation as listed below. Although the **first three were performed simultaneously**, for clarity, they are each **discussed separately**:

(a) Analysis which was done question by question.
(b) For each question, C1 and C2 were looked at separately as well as compared (multiple method comparative analysis).
(c) Where appropriate, quantification of qualitative data was employed.
(d) Cross-question analyses took place between certain questions.

Within each case study, where relevant, findings were compared against other research done in the same area. This constituted the **first stage of comparison with existing literature** (Figure 1.3).

***(a) Question by question analysis***

Although ideas on what the data may be saying began to form during data collection, concentrated analysis of data followed, with a view to generate findings (meanings, patterns and relationships). Coding was the first part of this (Section 3.6.3). The process of grouping quotes under codes is in itself a form of data reduction. Each question was then analysed in the way deemed to most truly reflect the data and honour what participants had said, for example what codes had the greatest frequency, or grouping several codes together if a prevalent theme was noted. If a code had only one quote, it would not necessarily be discussed, unless pertinent to the research focus. Running the analysis question by question (instead of via wider more inclusive codes) meant that there was sometimes overlap in what emerged across questions. An advantage is that through this method, a form of data saturation was realised. As themes recurred across questions, the researcher could pick up on those that were pertinent and pervasive. This method is one of the options suggested by Morse and Maddox (2014:529) for analysing multiple method studies. They refer to the question asked to participants as the main topic, under which the topics/themes emerging from that question are then discussed separately.

The analysis was textually written up using quotations from all four methods of data collection to build the arguments (Roulston, 2014). Regarding focus group data, Barbour (2014a) reports that some commentators are critical of using single quotes from participants as opposed to longer exchanges between participants. However, she argues for pragmatism, and that the right choice (of individual quote or longer exchange) to illustrate a point will be obvious. In this research, individual quotes are used more often, but where a discussion best illustrated a theme, then that was used.

Barbour (2008) cited in Barbour (2014b), mentions that the role of the researcher is to provide an overview and transcend the voices of individuals and groups. To do this, at the end of the analysis for each question, the researcher stepped back from the detail to ask: “Viewed in its totality, what is the crux of the participants’ answers to this particular question?” A summary was then created for each question. These summaries fed into the two final summaries/synopses created at the end of each case study. The second-last summary still considered the data question by question; but the final summary departed from individual questions to answer what has made C1 positive towards the reserve, what has made C1 negative towards the reserve, and what would make C1 more positive in future. This is what Creswell (2014) calls interrelating the themes to show a higher level of analysis. The creation of summaries at the end of each question and at the end of each case study constituted important steps in reducing the data.

***(b) Multiple method comparative analysis***

A multiple method study requires **integration and comparison of data** (Coles *et al*., 2013; Creswell, 2014; Morse & Maddox, 2014; Palmberger & Gingrich, 2014). Barbour (2014b) concurs, stating that neglecting the potential to compare, is a weakness in qualitative analysis. Yet, MacQueen and Namey (2012) point out that descriptions of how to perform across-group or within-group comparisons are difficult to find. They suggest at a basic level, that the analyst examines the themes across groups and then notes where these are similar and different. Palmberger and Gingrich (2014:106) revert to pragmatism as a solution, stating that "… it is a rather pragmatic and flexible process to choose between the different available options of comparative ranges".

In qualitative research, the reporting of **multiple perspectives** is encouraged, aiming at developing a complex holistic account (Creswell, 2014). Glaser and Strauss (1967) agree, adding that there should be no limits, but should be flexibility regarding the methods and means of collecting data from group to group.

**This study involved multiple perspectives, and comparison between these and integration of these was achieved by cutting across the two data sets produced by C1 and C2 respectively**. In this regard, "qualitative researchers typically gather multiple forms of data … and organize it into categories or themes that **cut across all of the data sources**" (Creswell, 2014:185-186). MacQueen and Namey (2012:161) refer to "attempting to discern similarities and differences across groups of individuals … **across different data types**" and Cohen *et al.* (2011) argue that analysis that **cuts across different instruments** is necessary in order not to lose connections between data. Finally, Glaser and Strauss (1967) contend that a variety of **slices of data** are highly beneficial for generating theory because they yield more information than any single mode of knowing.

Reflecting on the logic of comparing C1 and C2 and cutting across these two data sets to produce slices of data, the researcher considered the following. Palmberger and Gingrich (2014:103) write that "it depends on the research question whether the choice of these units does or does not make sense: if I am interested in their respective contents of water, sugar and vitamins, then I may very well compare apples and oranges, quite to the contrary of what folk wisdom believes to be self-evident". Elsewhere they contend that "the units of analysis may be regions, sections of society …, family status or other elements of social difference", and will at some point in the research need to be compared (Palmberger & Gingrich, 2014:101). For example, Orr's study of carers in the UK included carers, service providers and policy makers, using interviews and focus groups with all three groups (Orr, 2011 in Barbour, 2014b). Orr found that this comparison across groups, using different methods, yielded many commonalities which shaped the final recommendations produced (Barbour, 2014b). Hence, it was concluded that in the context of this study, in order to answer the research objectives, C1 and C2 both had to be considered and compared because the researcher wanted to know their 'respective contents' regarding each question. The differing sample sizes for C1 and C2 did not prove to be an issue as demonstrated in

Figures 4.11, 5.11 and 6.11 from Chapters 4, 5 and 6 respectively. Even though C2 contained fewer participants, because they had lengthy individual interviews, in some questions they produced more or similar frequencies of quotes as was produced during the multiple methods used with C1. The similar frequencies demonstrated that one constituency was not being over or under represented. The reader is reminded of the logic behind the different sample sizes for C1 and C2 (refer to Section 3.5.2.2, Point 'b').

In this study, due to the multiple research methods, two constituencies and three case studies, this research acquired a complexity which took it well beyond 'basic', fitting with the following quote. "Data are complex, particularly thematic data, that involve cross-cutting and hierarchical themes. Adding multiple sites and populations to the mix increases this complexity exponentially" (MacQueen & Namey, 2012:255). With no comparative analysis 'recipe' evident in methodological literature to handle this complexity, the researcher developed the analysis approach led by the data. The researcher considered two constituencies (sections of society), namely C1 and C2, noting similarities and differences and then integrating their results to provide a holistic account. Palmberger and Gingrich (2014) point out that when data sets are compared, a more structured approach is needed to broadly cover the same issues and for consistency. This study followed a highly structured approach – first of all, for C1 and C2, similar questions were asked, so that comparisons could be made; and secondly, for each case study, the same protocol was followed. Thirdly, a universal coding frame was developed and applied to data from both constituencies. In addition, the CAQDAS programme, Atlas.ti, was invaluable in enabling comparisons across a large amount of data.

***(c) Quantification of qualitative data***

Quantification of qualitative data via frequency counts is an established practice in qualitative studies, and a useful supplement to analysing qualitative data (Cohen *et al.,* 2011; Miles *et al.,* 2014; Saunders *et al*., 2009; Schreier, 2014). Frequency counts are helpful to see quickly what is present in a large complex dataset. Furthermore, they provide an important overview of the data; keep the researcher analytically honest; protect against bias or 'cherry picking'; and help to ensure that a theme is indeed important or recurring (Barbour, 2014b; MacQueen & Namey, 2012; Miles *et al.,* 2014). A further advantage is that in research where one has different groups (as was the case in this study), the researcher can compare the frequency with which codes are applied to texts from the different groups to see if the pattern is similar or contrasting (MacQueen & Namey, 2012).

This technique, however, must be used in close contact with the raw data, namely the quotations, and is not the finding in and of itself (MacQueen & Namey, 2012). This is an effective combination since "qualitative quotes and data can deliver a strong emotional connection [while] quantitative summaries help translate these emotions into potential actions" (MacQueen & Namey, 2012:153). Hence this research has used a combination of quotes and frequency counts where this was a valid course to take. At all times during data analysis, the content of the quotes took precedence over code frequency.

Original quotes were thus always considered first to determine if quantification was valid. The summaries at the end of each case study chapter bear testament to this. For example, under losses at DGR/KG, three quotes from C2 pertained to there being no losses. In this case, it would be misleading to compare frequencies, because three quotes were about no losses, whereas all the C1 quotes were about specific losses.

***(d) Cross-question analyses***

After the question-by-question analyses, cross-question analyses were performed towards the end of each case study chapter (Sections 4.3.10, 5.3.10 and 6.3.10). This involved comparing certain questions to see if patterns emerged; and considering the words used most across all the data.

### *3.6.5.2 Cross-case analysis: Analysis and interpretation layer 2*

Comparison between cases enables one to extend "beyond the particularities of an individual case and to reach higher levels of identifying similarities, commonalities, and differences through careful abstraction" (Palmberger & Gingrich, 2014:97) and to deepen understanding and explanation (Miles *et al.,* 2014). This **second layer of analysis and interpretation** occurred in Chapter 7 (Cross-case analysis) and was a significant stage in reducing the data. This analysis and interpretation was done per research objective (some of which encompassed two or more questions), and resulted in the identification of meta-themes. These themes transcended the codes, were at a higher level of abstraction (MacQueen & Namey, 2012), and referred to the most important issues relating to the research aim (Yin, 2009). At this point, the study's findings are compared with those emanating from previous research. This constitutes the **second stage of comparison back to the literature in Chapter 2** (Figure 1.3).

### *3.6.5.3 Theory and recommendations: Analysis and interpretation layer 3*

The construction of a theory and the development of recommendations in Chapter 8 constituted the **third layer of analysis and interpretation.** The meta-themes that emerged during cross-case analysis formed the building blocks for the data-driven theory, as well as being the source of the recommendations that were developed for protected area managers and the community. The output of a theory is motivated in Section 3.4.3, and the specific theory constructed is introduced in Section 8.2.1 and then compared to other schema that exist in literature. The latter constitutes the **third stage of comparison back to the literature** in this study (Figure 1.3).

### *3.6.5.4 Framework: Analysis and interpretation layer 4*

The development of a comprehensive integrated framework in Chapter 8 constituted the **fourth layer of analysis and interpretation.** To achieve this, information was taken from four areas of the thesis and combined. In short, it involved using the theory that had been constructed from the findings of this

research, and adding existing literature that had been written up in Chapter 2 to create a tool that could be used by relevant stakeholders to achieve middle ground in the people/parks relationship. This formed the **fourth stage of comparison back to literature** (Figure 1.3), and by doing so it widened the applicability of the study.

**In closing Section 3.6 on data analysis and interpretation**, it should be asserted that Roulston (2014) argues that what is important is that the analysis is informed, thorough and rigorous. This researcher followed a novel methodological pragmatic approach to advance understanding regarding the research aim, and is confident that this was indeed performed in an informed, thorough, systematic and rigorous manner, as documented in this chapter.

## 3.7 Validity, reliability and generalisability

The terms validity and reliability have been borrowed from the quantitative tradition, but have a different meaning in the qualitative research approach (Creswell, 2014). Some authors have therefore rejected these terms (Hussain, Elyas, & Nasseef, 2013) and proposed alternatives. Guba and Lincoln (1994), for example, suggest the use of credibility, neutrality, confirmability, dependability, consistency, applicability, transformability, trustworthiness and transferability. In spite of the argument over terminology, what remains certain is that qualitative research must hold validity and reliability, but that these are achieved in different ways to the quantitative tradition (Cohen *et al.*, 2011). The key steps taken in this research to ensure validity and reliability are outlined next. These are followed by a section on generalisability of the results.

### 3.7.1 Validity

Miles *et al.* (2014) equate validity with trustworthiness. It can also be linked to credibility. In qualitative studies, ensuring validity does not imply the presence of objective or an ultimate truth, but is rather the extent to which the researcher captures the knowledge and experience of participants, and the credibility of the resultant findings and conclusions (Maxwell, 2013; Saunders *et al*., 2009).

MacQueen and Namey (2012) suggest that the inductive nature of qualitative data collection in itself improves validity because, in comparison to structured-answer quantitative questionnaires, the participant can answer in their own words, unconstrained by pre-set responses, and the interviewer can respond appropriately on the spot if the question is not understood. In addition to the inductive nature of this research, several other validity strategies were followed, which are outlined below:

#### *3.7.1.1 Triangulation by method*

Triangulation is a common and powerful form of demonstrating validity (Cohen *et al.*, 2011; MacQueen & Namey, 2012). It is achieved by using multiple methods with different sources (participants) and then comparing findings (MacQueen & Namey, 2012; Miles & Huberman, 1994). Yin (2009:115,116) strongly advocates for the use of multiple methods in case study research to develop "converging lines of enquiry, a process of triangulation and corroboration … Thus, any case study finding or conclusion is likely to be more convincing and accurate if it is based on several different sources of information, following a corroboratory mode".

In this study, the use of multiple sources of data from two different constituencies within a case study research design enabled the data to be triangulated in three ways. Firstly, the multiple data sources used for C1 (FGIs, adapted NGT and mapping) meant that several opportunities were provided for themes to emerge repeatedly. The different methods also enabled quieter participants to contribute more in the less verbal methods of mapping and NGT. Secondly, comparison between C1 and C2 confirmed themes, but also elicited some interesting differences. Thirdly, the multiple case study design (with the same process replicated at all three sites) and cross-case analysis further strengthened the validity of the results (refer to 'Consistency' and 'Replicability' in Section 3.7.2).

Finally, combining existing literature with the findings of this research to develop a comprehensive integrated framework that represents the components that can influence people-park relationships, was the ultimate form of triangulation. The table preceding this framework provides convincing evidence of validity, as it demonstrates the different layers of the framework and their origins.

#### *3.7.1.2 Member checking*

Member checking, also known as respondent validation or informant feedback, assists in ensuring validity (Cohen *et al.,* 2011; Mertens, 1998). In this study it was conducted in several ways. Firstly, during C1 FGIs and C2 IIs, the researcher could ask for clarification of a response if required. Secondly, during NGT, with the assistance of the translator, any unclear notes were clarified. Finally, after processing and analysing the data for each case study, informant verification was sought on matters that were still unclear or where there were discrepancies. The researcher contacted key participants at each site, depending on the information that required verification:

- at DGR/KG this was the reserve manager (via phone), the leader of the community block group system, and a lodge owner who is very involved with the community (both via meetings at DGR);
- at MNR/K, this was the reserve manager (via email); and
- at PGR/M, the researcher contacted the reserve manager and HR manager at Phinda and two key managers at Africa Foundation (via email and skype).

#### *3.7.1.3 Rich thick descriptions and using verbatim quotes*

Maxwell (2013) refers to rich data that are detailed and descriptive, which require detailed transcriptions. The interview recordings (for both FGIs and IIs) were transcribed word for word. The write-up of the case studies (Chapters 4, 5 and 6) is lengthy because the researcher unpacked each question asked, considering the main findings from C1 and C2, and then comparing them. MacQueen and Namey (2012) state that verbatim quotes are vital to provide the reader with sufficient information with which to see the themes and judge the findings. In this study the quotes prove the findings, and reveal the different perspectives.

The question-by-question analyses fully describe how the final findings (in the summaries at the end of each question) are reached. These summaries feed into the tabular and diagrammatic synopses at the end of each chapter. By navigating Chapters 4, 5 and 6, the reader is walked through the process taken to arrive at these synopses. The different layers of interpretation and analysis which are followed to progressively reduce the data (to result in the theory, recommendations and framework) are clearly set out for the reader.

#### *3.7.1.4 Double-checking translations*

For notes produced during NGT in the participant's own dialect, the researcher asked for a translation on the spot, with the help of the facilitator/translator. After the event, these translations were double-checked by another translator, and this sometimes resulted in the code for the note being changed.

#### *3.7.1.5 Overcoming bias*

To avoid interviewer bias, where one's comments, tone or body language may influence participants' responses (Saunders *et al.*, 2009), the interviewer attempted to remain neutral in all interviews and to set a warm accepting tone during the interaction. The researcher also ensured that different participants had the opportunity to voice their views, and not to let certain participants dominate. Interviewer bias was further reduced with the use of a translator who also played the role of facilitator. This slightly removed the researcher from the process. The use of adapted NGT was highly effective in countering bias, because individuals wrote their own notes largely without discussion and hence these notes provided data in its purest form. Due to the fact that the translator may have held a bias, an independent person checked the NGT translations after the fieldwork was complete. Furthermore, before each session with C1, the researcher discussed the pointers set out in the case study protocol (Appendix B)) which emphasised the importance of translator neutrality. With mapping, the researcher and translator were entirely absent, which could have led to more freedom of expression amongst participants.

Miles *et al.* (2014) refer to 'personal bias' which has been covered above, and 'elite bias' where the voices of certain participants are over-presented and those less articulate fade into the background. Firstly, using multiple methods to allow different forms of expression countered this. Secondly, once coding had occurred, the data were analysed in terms of the code. At that point, the researcher no longer knew who the participant was. Furthermore, the coding, analysis and interpretation process was grounded in the data – "tied to the raw data, [to] what the participants actually said" and not flimsily subject to the whims of the researcher *(*MacQueen & Namey, 2012:97).

#### *3.7.1.6 Trustworthiness*

As mentioned in Section 3.7.1.5, the presence of the researcher could impact on the trustworthiness of the results. In cross-cultural research, respondents may react or answer differently in the presence of an outsider. For example, Gadd (2005) expresses concern that such a presence would encourage participants to give positive answers regarding wildlife because the researchers are probably pro-wildlife. However, Gadd found that respondents did express many negative attitudes as well. To encourage trustworthiness, the researcher reminded participants that the write-up is anonymous and that truthful answers are important. As mentioned above, the use of a local translator helped to reduce bias and improve trustworthiness. At all three case study sites, the researcher found that participants were willing to express negative aspects. It also helped to ask such questions later on, once rapport and camaraderie had been established and participants were relaxed. In addition, the question which asked what friends and family think of the reserve ('Q5 Others' views'), provided an opportunity for negative opinions to be provided that were not linked directly to the participants.

#### *3.7.1.7 Process of developing the research instrument*

The validity of the research instrument strengthened through several phases. As demonstrated in Table 3.1, a review of topic and methodology related texts contributed to design and content, and the final questions were further refined following consultation with several academics. Finally, the various stages of the pilot study (Section 3.5.1.2) further strengthened validity.

### 3.7.2 Reliability

Synonyms for reliability are dependability, auditability (Miles *et al.,* 2014), consistency and replicability (Cohen *et al.,* 2011). A key element of qualitative reliability is a consistent approach that is reasonably stable over time, over instruments, over groups of participants and across methods (Cohen *et al.,* 2011; MacQueen & Namey, 2012; Miles *et al.,* 2014). Measures taken to improve reliability in this research are discussed next.

#### *3.7.2.1 Clear research objectives and a congruent study design*

The researcher logically moves from problem statement to research objectives, and continually reminds the reader when and how each research objective is achieved. Figure 1.3 sets out which section of the research design achieves which research objectives and which research gaps it solves.

#### *3.7.2.2 Consistency*

The research was carried out in the same way in each case study, following the steps detailed in the case study protocol (Appendix B). Yin (2009) views this as the key to dependability. Creswell (2014) urges researchers to check that there is not a shift in the meaning of codes during coding. Most of the codes were self-explanatory, but where confusion could arise, comments were attached to particular codes within Atlas.ti, using the comment tool. The comments highlighted what the researcher needed to be aware of when using that code. Coding was reviewed after a fair amount of coding had been done (MacQueen & Namey, 2012). In addition, detailed coding rules were developed for each question, and adherence to these was double-checked. All quotes were also printed out under their relevant code to check again if the correct code had been used. The detailed process of code refinement and data cleaning was followed for each case study and is explained in Section 3.6.3. In addition, the data was analysed in the same manner throughout as per Section 3.6.5.

#### *3.7.2.3 Checking transcripts*

Creswell (2014) and MacQueen and Namey (2012) view trustworthy verbatim transcripts as vital to rigorous and systematic analysis. In this research, all interviews were recorded and carefully transcribed – some by the researcher, but most by a professional transcribing company. Section 3.6.2 outlines the steps taken to carefully check the transcriptions. If something within the transcription was unclear or if the researcher did not understand the term or the meaning inferred, she checked this with key participants during member checking (Section 3.7.1.2).

#### *3.7.2.4 Replicability*

Yin (2009) states that if another researcher followed one's steps in exactly the same place and with the same participants, the same results should emerge. This is also referred to as transferability. However, MacQueen and Namey (2012:88) caution their readers that replication should not be as pressing an issue as validity, because "replication is rarely the goal of qualitative research". Strauss and Corbin (1990) concur, stating that reproducibility with social phenomena is probably impossible due to the challenge of finding a situation whose conditions exactly match those of the original study.

To aid replicability as far as is possible when dealing with social phenomena, the researcher carefully documented all the steps taken, and wrote up the case study protocol (as suggested by Yin , 2009). All efforts were made to conduct the data gathering methods at each case study site in the same way to aim for consistency. Cohen *et al.* (2011) refer to the importance of asking questions each time using the same wording and the same order. This was done as per the research instrument provided in Table 3.1. In addition, the coding frame, the data cleaning process and the coding rules are outlined. The process followed to progress from three case studies to the meta-themes of the cross-case analysis is also clearly documented. These meta-themes formed the basis for the theory, recommendations and framework.

### 3.7.3 Generalisability

According to Creswell (2014), the term 'generalisability' is used in a limited way since it is not the intention of qualitative inquiry to generalise findings to places and people outside of the study. The value is rather in the themes and descriptions generated. Saunders *et al*. (2009) and Saunders, Lewis and Thornhill (2016) concur, stating that one should be careful not to generalise to other settings, and that this 'limitation' does not affect the validity or value of the findings.

However, in multi-case research, findings can be generalised (Creswell, 2014; Lune & Berg, 2017; Yin, 2009), but this appears to be directly related to the number of case studies undertaken. Miles *et al.* (2014) suggest that five case studies is an optimal number, and that only having two to three cases reduces generalisability. Palmberger and Gingrich (2014:99), however, provide an example of three case studies where differences and commonalities that cut across the different cases were identified. They state that "this means that comparison achieves generalisation but in a more moderate, middle-range way". Guba (1981:81) in Rapley (2014:53) contends that the aim is therefore not to be able to generalise across all times and places, but to be able to generalise "to defined settings over a defined period of time". Barbour (2014b:507) concurs, suggesting that theoretical generalisability relates to "the usefulness of concepts and frameworks for a specific field of study".

Considering the authors above, the middle-range substantive theory produced in Section 8.2, that is grounded in the data from three case studies, cannot be broadly generalisable. Instead its generalisation is more moderate/middle-range, for the defined settings of the case study sites within the field of study of conservation and communities. Kelle (2014:562), however, differs from the authors above, asserting that middle-range theories "can often be sensibly transferred to other domains". The researcher therefore cautiously suggests that both the theory (Section 8.2) and the recommendations emanating from the theory (Section 8.3) may have wider applicability, and stakeholders can select what is relevant to them.

Furthermore, the framework (Section 8.4), as the final contribution of the study, has a broader applicability and wider generalisability as it combines the key findings with existing literature.

## 3.8 Ethical considerations

Ethical clearance was obtained in February 2015 from the Research Ethics Committee in the College of Agriculture and Environmental Sciences, as per the ethical clearance certificate in Appendix F.

As specified in the certificate, permission had to be obtained from the relevant local authorities, community leaders and conservation/tourism organisations. In addition to these permission letters, for MNR/K and PGR/M, the Eastern Cape Parks and Tourism Agency (ECPTA) and &Beyond respectively, had their own application processes which the researcher followed to obtain permission to conduct the research.

For all three case studies, an introductory letter was sent to the community leader and the reserve manager (Appendix G). Permission letters were signed by the community leader (for C1) (Appendix H) and by each reserve manager (for C2) (Appendix I). Before any data collection commenced within C1 or C2, informed consent was obtained from every participant (Appendices J and K). The researcher explained the study to participants and informed them that they could withdraw at any time and did not have to answer a question if they did not wish to. Participants were informed that confidentiality and anonymity would be preserved. They were also made aware of the purpose of the research and that the findings would be used for academic purposes only.

Due to the fact that the research with C1 takes several hours, participants were given snacks and drinks at teatime, and a meal at lunchtime. At each case study site, local people were asked to do the catering and were paid for this. The translator at each case study site was also remunerated for his/her services.

In the 'Norms and standards for the management of protected areas in South Africa', within Section 12 on research, one of the indicators is that "A mechanism exists to feed research results back to protected areas management to facilitate adaptive management" (South Africa, 2016:19). For ethical reasons too, feedback to reserve management and the communities is important to the researcher. In this research, the feedback thus far has been as follows:

- DGR/KG: In April 2017, a summary of findings was given to the owner of one of the main lodges who works closely with the local community. A more comprehensive feedback session to C1 and C2 will be undertaken in 2020.
- MNR/K: In March 2018, a feedback session was conducted in the community hall at Khanyayo. The reserve manager, key conservationists and the community members who formed part of C1 were present. Furthermore, the researcher was invited by the Chief Operations Officer at ECPTA to address top management and all ECPTA reserve managers at their annual Imbizo in March 2018 at Cape Morgan Nature Reserve.
- PGR/M: In September 2019, a report of the main findings was sent to Phinda – to the Phinda Regional Director (&Beyond) and the Regional Manager (Africa Foundation); as well as to the

CEO at the Africa Foundation Head Office in Johannesburg. The researcher was also invited to share the findings with senior management from Africa Foundation and &Beyond in October 2019 in Johannesburg. Following this, the researcher was invited to provide feedback to the Mnqobokazi community (C1 at PGR/M) in early 2020. Prior to this feedback, the researcher was invited by the Phinda Regional Director to share the findings from MNR/K and DGR/KG at the Rhino Protection Conference in August 2017 in Pretoria.

## 3.9 Chapter 3 summary

This chapter set out the research design and methodology followed to produce the findings. Due to existing attitudinal research being predominantly quantitative and focusing on communities, the present research is distinct in that a qualitative research approach was used in each case study to engage two different constituencies – the local community and stakeholders from the protected area – to learn from both the people and the park. Since each constituency has very different contexts, this research design provides insights from both sides that increase our understanding, provide a better triangulated response to these dual realities and yield interesting lessons. The research is also novel in the sense that it uses an unusual combination of research methods and tests a multiplicity of aspects. Via a multiple case study design with contrasting ownership and management structures in each case, common themes were identified which were used to produce the theory, recommendations and framework.

Chapter 3 explained the qualitative research approach and the paradigms of constructivism/ interpretivism and pragmatism that guided the research. The research design was described, followed by the data collection (from development and piloting of the instrument through to the sampling and the data collection methods used). Data interpretation and analysis contained several sub-sections, leading the reader through the organisation, preparation, coding, refining and cleaning of data to an outline of how findings were generated via four different layers of analysis and interpretation. Finally, the measures taken to ensure validity and reliability in a qualitative context were described, and generalisability and research ethics were considered.

The final section of Chapter 3 which follows, provides an orientation to the three case study chapters.

## 3.10 Orientation to case study chapters

Chapters 4, 5 and 6 follow the same structure. These chapters address Research Objectives 2, 3, 4, 5 and 6 at the case study level (the **first layer of analysis and interpretation**); while Chapter 7 comprises the cross-case analysis which is the second layer of analysis and interpretation, and the ultimate achievement of the above-mentioned research objectives (Figure 1.3). The case study chapters also fulfil the **first stage of comparison with existing literature**. This is depicted in Figure 1.3.

This section explains the approaches that are generic to all three case study chapters, to orientate the reader. It covers layout of the chapters; the structure used to present the results and interpretation; the use of quotes and methods used to reference quotes and images within Atlas.ti; and relevant abbreviations. Figure 3.12 introduces the layout used for the three case study chapters.

### 3.10.1 Structure used to present results and interpretation

The 'Results and Interpretation' part of each case study first presents the results and analysis for **each question asked to participants** (Sections 4.3.1 to 4.3.9; 5.3.1 to 5.3.9; and 6.3.1 to 6.3.9). The questions can also be found in the original research instrument (Table 3.1), with their source/s and rationale. In each of these above-mentioned sections, the following is included:

**Orientation table:**

This table provides the following pertinent information for each section:

- The first column provides the question number/ID (as per the research instrument in Table 3.1) and the coding prefix used in Atlas.ti.
- The second and third columns indicate whether it was asked to C1 only or to both C1 and C2 ('Y' refers to 'Yes' in this regard and 'N' to 'No').
- The fourth column contains the actual question.
- The fifth column provides the method used to collect the data for the question.
- Where relevant, there is a sixth column which mentions the section of the chapter where the results and data analysis for that question can be found.
- The last row refers the reader to the research objective addressed by the question/s.

***A. Overview:***

In this section the data are presented in tables. This overview examines the data at a glance, seeking the greater picture. While the same coding frame was used across all three case studies, for each question, **if a code was not used in a particular case study, then it is not included in the data table.** The exception to this is for the code group headings in the tables outlining specific benefits and losses. If no codes under a particular code group were used when coding the data from that particular case study, then the code group heading indicates a zero.

***B. Specifics:***

In this section, the data are interpreted and analysed code by code, providing quotes to substantiate the findings.

***C. Summary:***

The summary draws together the most pertinent findings from the responses to the questions asked. These conclusions are also used to create the summaries at the end of each case study.

After dealing with each question as per the structure above, **cross question analysis** is performed (Sections 4.3.10, 5.3.10 and 6.3.10). In Sections 4.4.2, 5.4.2 and 6.4.2, the summary for each constituency is created, and in Sections 4.4.3, 5.4.3 and 6.4.3, a combined summary is created for the particular case study.

All questions have their own prefix for the codes that were developed during coding for that particular question, and which are used in the tables. These prefixes are provided with their respective terms in Table 3.3.

Appendices D and E contain further detail on the coding rules and analysis tools that were applied to achieve consistency across case studies. This is for the purposes of replicability of the study for interested scholars.

### 3.10.2 Use of quotes and referencing quotes within Atlas.ti

Regarding the **use of quotes**, an ellipsis ('...') was used where some text has been removed from the original quote in Atlas.ti for the sake of brevity within the thesis. Sometimes a word was inserted to replace a string of words, or to clarify something. In these cases, the use of square brackets was used to denote a replacement term. Words such as 'um' and 'aah' have been deleted. In all other respects, the integrity of the quotes is maintained, and hence, these may contain grammatical errors. When a person's name is mentioned in a quote, to preserve anonymity, their name is replaced with an 'X'.

**Referencing quotes** drawn from Atlas.ti differs, depending on whether the quote is from a textual document, image (map) or a note from NGT. In all cases, 'P' refers to the primary document, and precedes the number of the primary document. For **textual documents**, the numbers after the comma show the start and end paragraphs within the primary document where the quote can be found. For example, the reference 'P332, 40:40' means that quote can be found in Primary document 332 and starts in paragraph 40 and ends in the same paragraph. 'P332, 52:87' means that this quote is in P332 and runs from paragraph 52 to 87. If a sentence in the analysis refers to more than one quote, the quotes are referenced as follows, for example 'P355, 73:73; 103:103; 111:111'. This means that all three quotes are found in P355. The first quote begins and ends in paragraph 73, the second quote begins and ends in paragraph 103, and so forth.

Some paragraphs are lengthy. In those cases, there may be several different quotes coded with different codes within the same paragraph. The reference to the lengthy quote will then be the same in each instance, but in the majority of cases will not refer to the same chunk/segment of the paragraph. For coding rules, the reader can refer to Appendix D.

To reference 'quotes' that are sub-sections of an **image** (as in the mapping exercise), the '@' precedes the section of the drawing which has been coded. An example is 'P344, @135-@78'. How the maps were coded is illustrated in Figure 3.8.

Finally, to reference **NGT notes** (which were usually one word or a single sentence), the paragraph numbers are not provided, because they are all '10:10'. This is because each note was captured as a single primary document with the exact same format, and hence the actual quote always falls in paragraph 10. These citations will appear in the text as, for example, 'P76'. In other words, this NGT note was numbered as primary document 76 in Atlas.ti.

The relevant primary documents referenced within the three case study chapters are outlined below:

- **For DGR/KG**: P74 to P116 were the notes produced during NGT; P332 to P334 were the focus group transcripts (FG1, FG2 and the transcript of the dream with both focus groups together); P344–P345 were the two maps; and the following primary documents were those of the individual interviews: P338, P339, P343 and P348.
- **For MNR/K**: P237 to P331 were the notes produced during NGT; P335 to P337 were the focus group transcripts (FG1, FG2 and the transcript of the dream with both focus groups together); P346–347 were the two maps; and the following primary documents were those of the individual interviews: P2, P340, P341 and P342.
- **For PGR/M**: P441 to P494 were the notes produced during NGT; P353, P356 and P351 were the focus group transcripts (FG1, FG2 and the transcript of the dream with both focus groups together); P497–P498 were the two maps; and the following primary documents were those of the individual interviews: P350, P352, P354, P355 and P357.

### 3.10.3 Abbreviations used

Table 3.3 contains all the abbreviations used across Chapters 4, 5 and 6. Some of these are code prefixes, such as B (for Benefits) and D (for Dreams). The orientation table at the start of each question also reminds the reader of these. Others relate to the methodology used, while some appear in text.

Table 3.3: Abbreviations used in case study chapters

| Abbreviation | Explanation |
|---|---|
| B | Benefits |
| C1 | Constituency 1 |
| C2 | Constituency 2 |
| D | Dreams |
| EX | Experience |
| F | Females |
| FGI | Focus Group Interview |
| FG 1 | Focus Group 1 |
| FG 2 | Focus Group 2 |
| II | Individual Interview |
| K | Knowledge |
| L | Losses |
| LC | Local Community |
| M | Males |
| MP | More Positive |
| N | No |
| NC | Negative Changes |
| Neg | Negative |
| NGT | Nominal Grouping Technique |
| OV | Others' Views |
| P | Primary document |
| PC | Positive Changes |
| Pos | Positive |
| Q | Question |
| R | Relationship |
| RP | Responsibilities |
| WCPD | What Can People Do |
| Y | Yes |

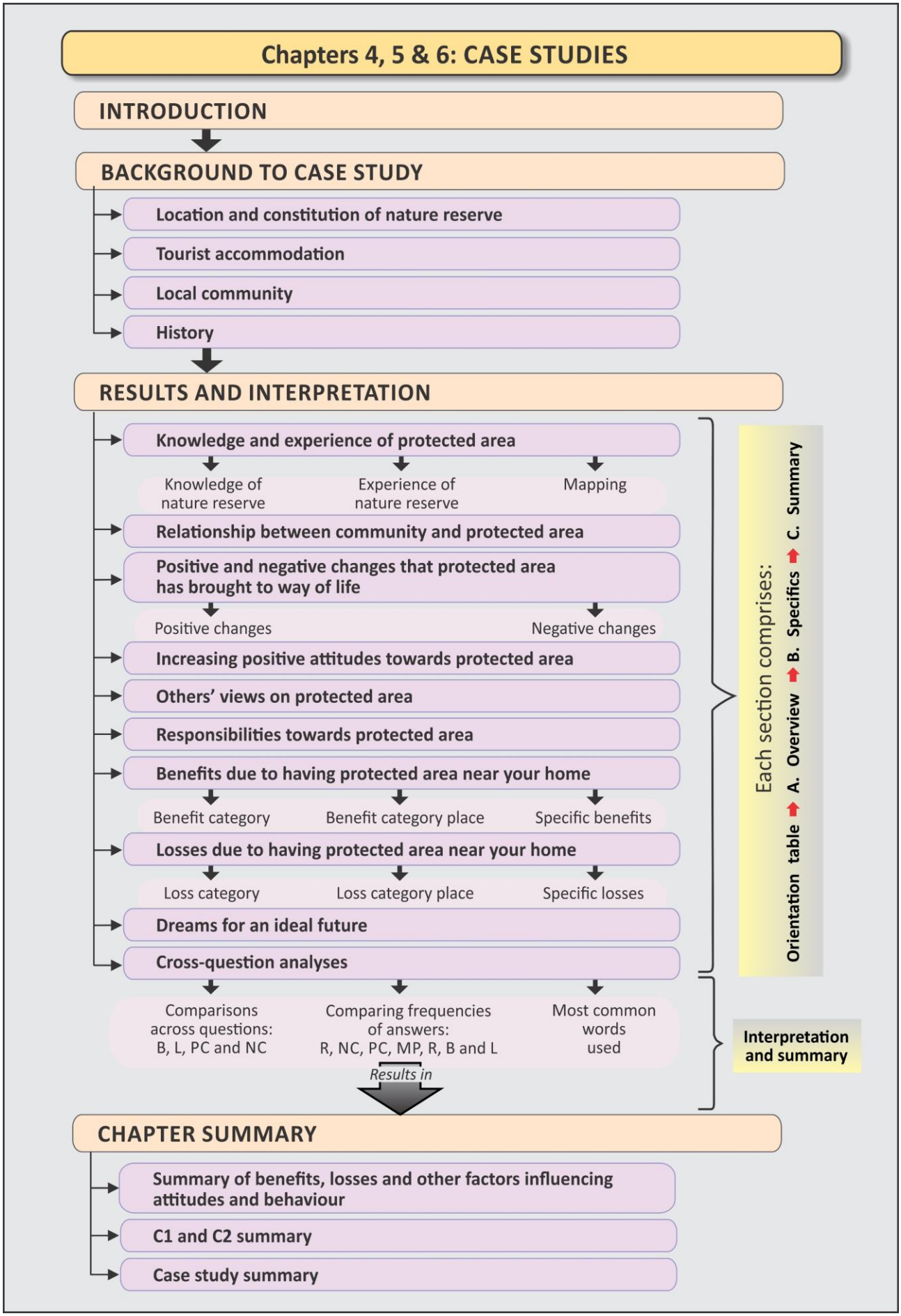
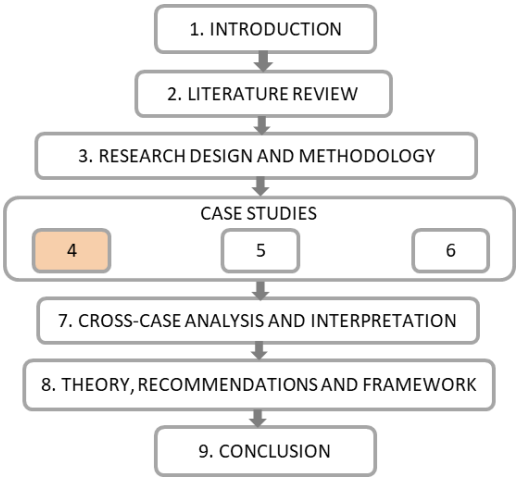



Figure 3.12: Chapters 4, 5 and 6 layout

Chapter 4

# Case Study 1: Dinokeng Game Reserve and Kekana Gardens community




*"Everywhere the city was driving back nature, to the south and the west and the north. Only the east was safe, for there lay the ocean. Skyscrapers stood on the places where elephants had crashed through the forests. Hippopotamus Pool was a city square full of the smells of buses, Lion's River ran down a straight concrete channel into the bay".*

(Alan Paton, 1970:13)

## 4.1 Introduction

This chapter provides a brief background to Dinokeng Game Reserve and the Kekana Gardens community, followed by a detailed description of the results emanating from the data collected at this reserve and in the local community. Results are presented and analysed question by question, each ending with a summary, followed by a few cross-question analyses. At the end of the chapter, these summaries are used to create a summary for each constituency (C1 and C2), followed by a holistic summary for this case study site. This process is followed in all three case study chapters (namely Chapters 4, 5 and 6), and constitutes 'Analysis and interpretation layer 1' (as per Figure 1.3).

Dinokeng was chosen as one of the case studies for this research because, in terms of the management and ownership structures, the reserve is a public-private partnership between provincial government and private landowners. Tourism establishments within Dinokeng are operated by different landowners and range from budget to luxury. Regarding the level of improvement in human wellbeing for surrounding communities, due to it being a fairly new reserve, only officially opened in 2011, the relationship with the community is still in its infancy, and reserve management and landowners are still developing various economic and social upliftment programmes.

## 4.2 Background to Dinokeng Game Reserve and Kekana Gardens community

### 4.2.1 Location and constitution of nature reserve

Dinokeng Game Reserve (DGR) is situated in the north-east of Gauteng province, 50 km north of Pretoria, which is one of the three capital cities of South Africa. The game reserve forms part of the greater

Dinokeng initiative, which covers 281 000 ha (Dinokeng Blue IQ Project Management, n.d.). The greater Dinokeng initiative aims to offer domestic and international tourists an 'Africa in a day' circuit, providing a range of natural and cultural experiences (Harrison & Heese, 2012; Singh, 2008). Dinokeng is a Tswana name meaning 'place of rivers'. The greater Dinokeng initiative is bordered by the N4 highway in the south, N1 highway in the west, Rust de Winter in the north, with Onverwacht forming the most easterly location. It includes the Roodeplaat and Cullinan areas, as well as four provincial game reserves (Roodeplaat, Leeuwfontein, Rust de Winter and Mdala) (Dinokeng Blue IQ Project Management, n.d.); two large rivers; three dams; and a range of historical and cultural sites (Harrison & Heese, 2012).

As mentioned above, the DGR lies within the greater Dinokeng initiative. The reserve is a public-private partnership established by the Gauteng Provincial Government and private landowners, and currently comprises 18 500 ha (Van Rooyen, 2013). DGR is unique in that the land is owned by private landowners who have undertaken to develop their farms as game farms and drop the fences. There are currently approximately 200 participating owners (Mongena Game Lodge, n.d.) who undertake not to develop more than 1% of their land and to let game roam on their property (Stevens, n.d.). Constituency 2 in this case study comprised landowners involved in tourism and conservation, as well as those involved in the management of the reserve.

The title deeds for DGR reflect a nature reserve status, and this status cannot be changed to another form of land use (Stevens, n.d.). Government's role is to provide the infrastructure necessary for the reserve, and to assist in socio-economic development of surrounding communities. Stevens (n.d.) reports, for example, that government interest in the area has already resulted in three new schools, an improved road, and clinics. The reserve aims to support sustainable local economic development linked to nature-based tourism, which involves all stakeholders, namely local communities; landowners; the business sector; and local, district and provincial authorities (Mongena Game Lodge, n.d.; Van Rooyen, 2005). In this sense, it is a unique and ambitious partnership.

The DGR has five entrance gates, each one named after one of the Big Five (in Tswana or Zulu). The reserve contains 15 different plant vegetation types (Van Rooyen, 2013), but is predominantly made up of savanna grassland and indigenous bushveld (Mongena Game Lodge, n.d.). It is the only reserve in Gauteng to host the Big Five, as well as brown hyena, cheetah, giraffe and a wide variety of ungulates (Van Rooyen, 2013). Figure 4.1 depicts the location of the reserve and Kekana Gardens community within Gauteng. Figure 4.2 is a larger scale map indicating the reserve, the community and major landmarks.

The reserve does not yet have formal protected area status, according to the definition of the South African government found in the NEMPA Amendment Act of 2014 (South Africa, 2014). Obtaining this is a complex process because DGR first needs to be proclaimed at national level. For that to occur, buy-in must be obtained from both Gauteng and Limpopo provinces. This status is also dependent on DGR

showing complete compliance to all South African laws, such as those relating to employment, nature conservation and environmental impact assessments (Stevens, n.d.).

Written into the business plan of the reserve (Van Rooyen, 2005) is extensive commitment to the upliftment of surrounding communities and conservation of the environment, some examples of which are outlined below. Regarding employment, employees should come from surrounding communities, comply with legislative requirements and include training. The plan mentions equity ownership of game

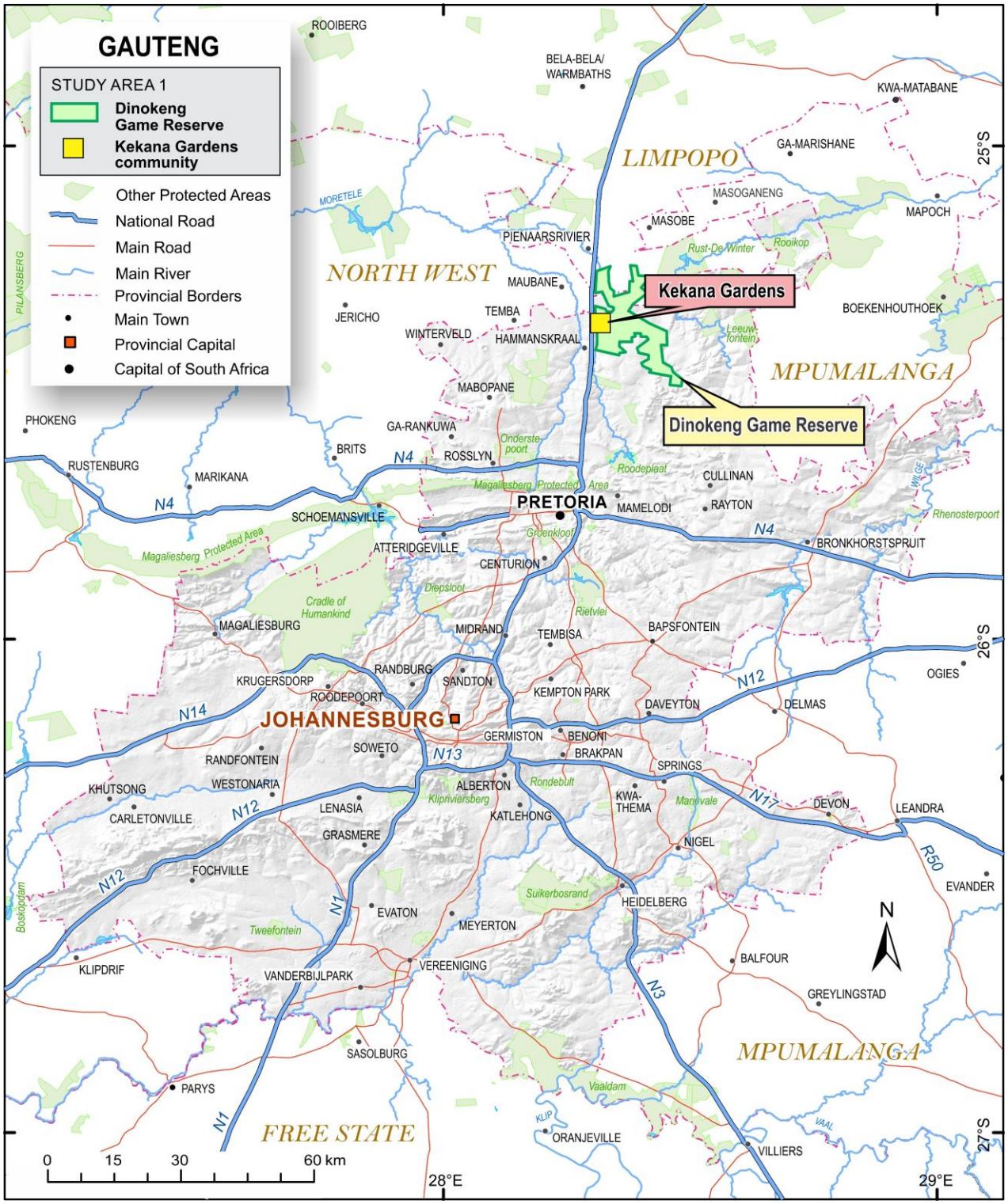



Figure 4.1: Dinokeng Game Reserve and Kekana Gardens within Gauteng province

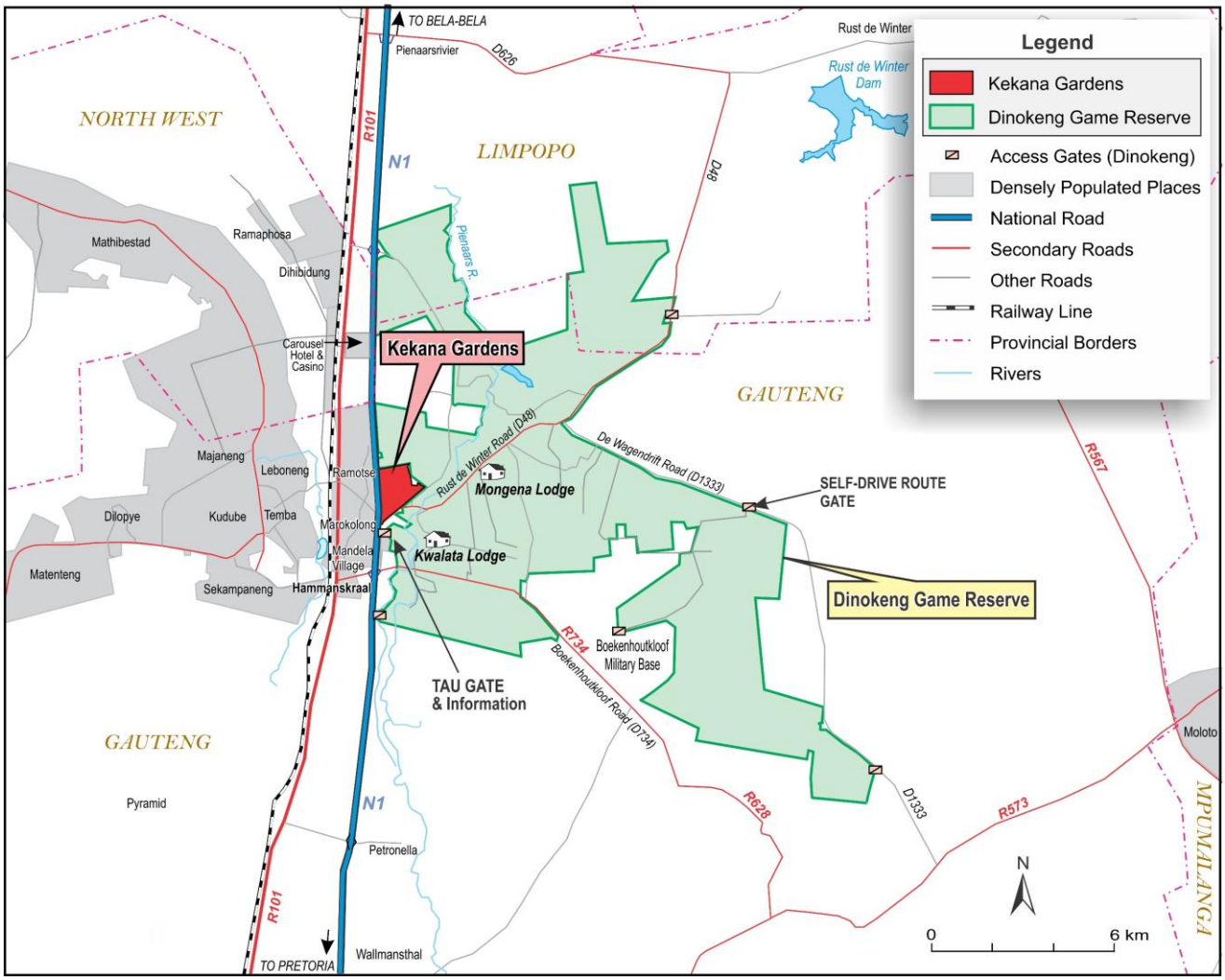



Figure 4.2: Dinokeng Game Reserve and Kekana Gardens

stocks by landowners and historically disadvantaged citizens. Suppliers also need to obtain a portion of their inputs from local SMMEs and Black Economic Empowerment owned suppliers, and retailers need to stock a proportion of locally produced supplies. In the business plan, landowners are tasked with facilitating links between the tourism industry and local people and businesses; assisting SMMEs and entrepreneurs; developing a social responsibility programme; and facilitating access for locals to visit the reserve. Tourism operators need to commit to practising responsible tourism; respect the local community and encourage guests to respect this culture and its traditions and to interact with locals; abide by the requirements of the South African Tourism Services Association (SATSA); become members of Tourism Marketing South Africa (TOMSA); and be graded by the National Tourism Grading Council (Van Rooyen, 2005).

Finally, it needs to be acknowledged that while the developmental yield of this project is potentially extensive (Van Rooyen, 2005), it will take many years and extensive negotiation and interaction to see the plan come to full fruition.

### 4.2.2 Tourist accommodation

At the time of writing, the DGR website listed 36 accommodation establishments within the reserve. These range from rustic camping to bush shelters to self-catering to luxury all-inclusive lodges (Dinokeng, 2017; Dinokeng Game Reserve, 2017). Bookings can be made on the website which will then direct the booking to the establishment or one can book directly with an accommodation provider. The reserve is also well known for hosting weddings, conferences and events, with multiple venues to choose from. Guests are also encouraged to visit the restaurants along the self-drive route (Dinokeng Game Reserve, n.d.).

### 4.2.3 Local community

DGR was established with the two-fold purpose of conserving the relatively unspoilt natural environment as a tourism destination, and to bring about socio-economic upliftment for nearby historically disadvantaged communities (Van Rooyen 2005; Van Rooyen, 2013). Constituency 1 in this case study was the peri-urban community of Kekana Gardens location in Hammanskraal. This location covers 2.61 $km^2$ and is nestled between the N1 highway and the reserve (Figure 4.2). At the time of the last census in 2011, the population was 15 709. The majority of this community speak Sepedi or Setswana, and 50.43% are female, while 49,57% are male (Census, 2011).

This community was chosen since it is the closest community to the reserve within Gauteng and has hence been the community with which the landowners have worked the most. Kekana Gardens location is organised into a block system, with 28 blocks, each of which has its own chairperson. Heading up the entire structure is the 'All Blocks Chairperson'. This structure has facilitated the cooperation between the community and the reserve[5].

Kekana Gardens and DGR form part of Ward 73, which falls within Region 2 of the greater City of Tshwane Metropolitan Municipality (City of Tshwane, 2015). The following statistics come from the most recent 2011 census and relate to Ward 73. The ward has a population of 39 616. The majority are young people, with 41% below the age of 19, 21% from 20 to 29 and the remaining 38% aged 30 and older. Within this ward, 32.3% of households live in informal dwellings (shacks) while 65.3% of households are fully owned or being paid off (Wazimap, 2011a).

Regarding the level of education, 66% have completed Grade 9 or higher, while 36% completed Matric. In South Africa, Grade 9 pupils are approximately 15 years old, and matriculants 18 years old. Of these matriculants, 2% hold tertiary qualifications (Wazimap, 2011a). Although by no means a census, a more

5. Personal communication with Mr Reward Shadung (All Blocks Chairperson) on 21 April 2017; and Ms Jenny Stevens (DGR Operations Manager) on 3 December 2015.

recent study conducted by Coetzee, Sime and Chokuda (2013) in the nearby Rust de Winter and Rapotokwane communities revealed that 11% held tertiary qualifications, with most of these people working in the public sector. The unemployment rate is 27%, while 32% are not economically active. Of the 37% who are employed, 68% are employed in the formal sector (Wazimap, 2011a). In terms of annual household income, 20% of households live on zero; 5% live on under R4 800; 7% on R5 000 to R10 000; 17% on R10 000 to R20 000; 21% on R20 000 to R40 000; 16% on R40 000 to R75 000; and 9% on R75 000 to R150 000. No one reported annual earnings above R600 000. The average monthly income is R2 400.00. About 19% earn below R800 per month while 49% earn between R800 and R3 000 (Wazimap, 2011a). These statistics are similar to what Coetzee *et al.* (2013) found in their study, and indicate that many are struggling to meet basic needs, in spite of government attention in the area.

### 4.2.4 History

The Kekana Gardens community is relatively new to the area. Prior to 1990, there was no community on the eastern side of the N1. It began as a squatter settlement but was later formalised[6]. Due to this, and the fact that the reserve is also fairly new (having been farmland beforehand), in that sense, there is no history of a relationship between this community and the game reserve. Most residents are migrants, having moved into the area from elsewhere[7]. However, there are descendants of a chieftaincy from the Hammanskraal area who now live in Kekana Gardens (Godsell, 2013). For this reason, the history of this community is briefly considered, followed by the history of DGR.

#### *4.2.4.1 History of community*

Even after the abolishment of the homelands[8] and inclusion of these into post-apartheid South Africa, complex historical power negotiations continuously occur in these areas. Hammanskraal is no exception, as a split chieftaincy negotiates power along with the newer political structures put in place by the post-1994 government (Godsell, 2013). The new framework developed by the African National Congress (ANC) allows the recognised chief to play an important role in development, change and restitution in rural areas (Godsell, 2013). The fact that there is dispute over the chief (as detailed next) is problematic.

The Kekana Gardens community forms part of the greater Hammanskraal community and was originally part of a Ndebele Tswana speaking chieftaincy, with the traditional authority being referred to as the AmaNdebele-a-Moletlane or AmaNdebele-ba-Lebelo. The latter name was assigned to the group in the 1970s following a leadership dispute with Lucas Mangope, who was president of the Bophuthatswana homeland at the time (Godsell, 2013). In the late 1800s, a split occurred resulting in two factions – the Majaneng group (which remains the officially recognised chieftaincy for the AmaNdebele-A-Moletlane,

6. Personal communication with Charl Pretorius (Kwalata Lodge) on 21 April 2017.
7. Personal communication with Charl Pretorius (Kwalata Lodge) on 21 April 2017.
8. The homelands were established by the Apartheid Government to house the majority of the South African Black population. These areas were afforded limited self-government. The system was abolished in 1994 (South African History Online, 2011).

which sits in Majaneng, Hammanskraal) and the 'AmaNdebele-A-Moletlane Traditional Authority', which today has its offices in Kekana Gardens, and is sometimes referred to as the 'Kekana Gardens faction' (Godsell, 2013).

The first land claim to be submitted was by 'the unrecognised' AmaNdebele-A-Moletlane Traditional Authority in 1995. The group justified the land claim with a detailed history dating back to the 1600s (Godsell, 2013). Other land claims followed prior to the 1998 closing date. Interestingly, the Kekana Gardens faction has the title deeds for the contested property (a farm, which both factions claim to have purchased in 1911), although the Majaneng group claims these were stolen from them in the 1960s (Godsell, 2013). At the time of writing, this land claim is ongoing. It involves large tracts of land bordering the reserve.

#### *4.2.4.2 History of reserve*

The idea to establish DGR dates back to 1995. By 2000, master planning had begun and the project was amalgamated into the Strategic Economic Infrastructure Investment Programme, which later became known as Blue IQ (Dinokeng Game Reserve, 2017). Blue IQ runs the project on behalf of the Gauteng Provincial Government (Van Rooyen, 2005). Following an unsuccessful attempt in 2002 to involve the large landowners in the north of Gauteng, in 2003, smaller landowners in the Hammanskraal area showed interest in participating, and actual 'signing in' to the project began in 2004. Between 2007 and 2008, the Dinokeng Game Reserve Management Association was created to manage the reserve, while Dinokeng Game Enterprises managed the game. The internal fences of the first 12 500 ha were dropped. The year 2008 also brought with it the first white rhinos to be released in the reserve. In 2009, gate construction began together with the fencing which would expand DGR to 18 500 ha (Dinokeng Game Reserve, 2017).

Lion and elephant were introduced into Dinokeng in 2011, becoming the first free roaming lions and elephants in Gauteng in 100 years (Mongena Game Lodge, n.d.). In the same year, the first visitors entered the reserve (Dinokeng, 2017; Kwalata Lodge, 2015) In 2012, buffalo and cheetah were introduced and Mr Piet Venter was appointed as the first general manager of the reserve. Another development in 2012 was that Blue IQ merged with the Gauteng Economic Development Agency to form the Gauteng Growth and Development Agency. At Dinokeng, its involvement is to develop strategic economic infrastructure with a view to leverage private sector investment in tourism business activity within Dinokeng (Dinokeng Game Reserve, 2017).

With the alarming rise in rhino poaching, the Rhino Rescue Project was started in 2013 and included the injection of a substance toxic to humans into the rhinos' horns. In 2014, construction began on the first phase of the self-drive route, which was further expanded in 2015, as well as construction beginning on a picnic site for day visitors. At this point, several raptors had also been introduced and these, together

with the mammals, started to breed successfully (Dinokeng Game Reserve, 2017). The DGR Community Development Trust was also established in 2014. Its short to medium term priorities are to expand the reserve towards Wallmansthal and the Rust de Winter Dam; to facilitate SMME development; increase wildlife security; and raise funds for additions to the reserve, for example, bird hides and picnic spots. Reserve expansion is therefore still underway, with the hope of reaching 40 000 ha as more landowners join (Dinokeng Game Reserve, 2017).

With community development and upliftment being a core reason for the creation of DGR, several initiatives are underway in this regard, some of which are mentioned next.

The Dinokeng Voluntary Rangers (also referred to as Honorary Rangers) promote conservation, patrol and work in the bush, and conduct various training courses. Their priorities are to promote a positive attitude amongst landowners in a bid to expand the reserve; to help with community beneficiation; assist with wildlife security; and promote awareness of nature conservation in the community (Dinokeng Game Reserve, 2017). In terms of community beneficiation, the voluntary rangers raise conservation awareness amongst local children; promote skills development; and provide training in conservation, game driving, snake handling, hospitality and first aid (Swanepoel, 2016).

In conjunction with the Honorary Rangers, the reserve has several initiatives aiming to get local people into the reserve: young people at Steve Biko High (Kekana Gardens) with learning difficulties; women involved in the soup kitchen (mentioned below); and a Youth Day programme which takes learners into DGR for a game drive, a presentation on careers in conservation and tourism, and a conservation quiz. Different landowners make their game vehicles available to transport these locals (Dinokeng Game Reserve, 2017).

A vital body forming part of the reserve structure is the Landowners Association. This body has its own constitution defining what participating landowners stand for, and making it simpler for the government, in that there is a single body with which to work (Stevens, n.d.).

Another body is the DGR Community Beneficiation and Relations Committee. In 2016, in partnership with the community, they held a winter soup kitchen project which ensured that children who are usually fed at school would be given a decent meal during the school holidays. Once again, landowners donated resources and time. Community members were also involved in the feeding programme, which fed approximately 140 children. The aprons worn by volunteers testified to the partnership ideology, with the printed words: 'Soup Kitchen Project 2016 – Kekana Gardens + Dinokeng Game Reserve'. As stated by Dinokeng Game Reserve (2017:n.p.), *"Worn on the way to and from the schools it demonstrated: we are one, and where we might not be yet – this is what we are aiming for".*

Other projects include: the DGR Employment Agency which aims to provide employment opportunities for locals and establish a database of skills available; the D'Nokasi Crafters (artists' cooperative) at Tau Gate; working with schools to establish recycling initiatives and Eco-Clubs; and distributing gift packages to mothers at the Jubilee Hospital in Hammanskraal (Dinokeng Game Reserve, 2017). Apart from collective efforts by landowners, some individual lodges also have their own social responsibility programmes. The website of Kwalata Lodge (2015:n.p.), for example, states that "all guests contribute consciously to the overall mission of Kwalata, which is to use tourism activities as a means to impact positively on our local community and the environment, in a manner that promotes human dignity in our community". Kwalata have worked with the community for many years, investing in educational programmes, day care centres, old age homes and numerous other initiatives (Kwalata Lodge, 2015). As a further example, Mongena Lodge annually hosts vulnerable children and the elderly, exposing many of them to free roaming wildlife for the first time (Mongena Game Lodge, n.d.).

In terms of tourism development, the self-drive route has recently opened, and allows visitors to access 110 km within the reserve. It has picnic spots, bird hides and a lookout point. Visitors can also stop at any of the restaurants/lodges en-route. Visitors need to get a permit and make payment at Tau Gate or Ndlovu Gate, from where the self-drive route commences (Dinokeng Game Reserve, 2017).

The vision is to expand the park to 120 000 ha, which will make it larger than the Pilanesberg National Park, which is 57 200 ha (Mongena Game Lodge, n.d.).

## 4.3 Results and interpretation

Chapter 3 describes the research process and methodology conducted across all three case studies and ends with an orientation to the three case study chapters. Table 4.1 reminds the reader of pertinent information regarding the participants in Case Study 1 and the data collection methods used. Presentation of results and data analysis for each question that was asked of participants, follows in Sections 4.3.1 to 4.3.9. Questions 1, 6 and the mapping activity are discussed together in Section 4.3.1 as they all relate to C1's knowledge of the reserve. Thereafter, the questions are discussed in the order in which they were asked since they progress from the general to the more specific. Section 4.3.10

Table 4.1: Case Study 1 participants and data collection

| | C1 | | | C2 |
|---|---|---|---|---|
| | **FGI 1** | **FGI 2** | **FGI 1 & 2** | |
| **Number** | 5 | 8 | 13 | 4 |
| **Gender** | 1 F, 4 M | 5 F, 3 M | 6 F, 7 M | 3 F, 1 M |
| **Method** | FGI & mapping | | NGT & Q14-10 via group interview | II |
| **Data collected on:** | 5 December 2015 | | | 3 December 2015 & 25 August 2016 |

contains some cross-question analyses, followed by Section 4.4, which concludes the chapter. Case Study 1 is abbreviated as DGR/KG (for Dinokeng Game Reserve/Kekana Gardens community).

### 4.3.1 Knowledge and experience of protected area

Three groups of questions were used to investigate C1 participants' knowledge and experience of the nature reserve, and are therefore all included in Section 4.3.1. Table 4.2 provides an orientation to these questions. C2 did not answer these two questions or do the mapping activity, as the purpose of these was to determine community members' knowledge and experience of the reserve.

Table 4.2: Orientation to Questions 1, 6 and mapping: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q1 / K=Knowledge | Y | N | What do you know about this reserve? What is inside this reserve? What can you do in there? | FGI | Section 4.3.1.1 |
| Q6 / E=Experience | Y | N | Who of you have been into the reserve? What do you go in for? What did you think of your experience? | FGI | Section 4.3.1.2 |
| Q Drawings / Dr=Drawings | Y | N | In a group, draw a map of the reserve and your community. | Mapping | Section 4.3.1.3 |
| **Research Objective** | | | 2 | | |

#### *4.3.1.1. Knowledge of nature reserve*

***A. Overview: Knowledge of nature reserve***

Table 4.3 depicts the results for Q1 on 'Knowledge of nature reserve'. When combining the results of C1 Focus Groups 1 and 2, the codes containing the highest number of quotes were 'Lack of info/access re.

Table 4.3: Code frequencies for 'Q1 Knowledge': DGR/KG

| | C1 | | |
|---|---|---|---|
| **CODE** (K=Knowledge) (WCPD=What Can People Do) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| K: Accommodation | 3 | 1 | 4 |
| K: Animals | 3 | 2 | 5 |
| K: Lack of information/access re. reserve | 8 | 1 | 9 |
| K: Local community use reserve for ... | 1 | 1 | 2 |
| K: Make-up and history of reserve | 1 | 1 | 2 |
| K: Provides jobs | 0 | 1 | 1 |
| K: Tourism | 2 | 0 | 2 |
| K: Want to be educated on conservation | 1 | 2 | 3 |
| K: WCPD: Conferences and functions | 2 | 0 | 2 |
| K: WCPD: Relax | 1 | 1 | 2 |
| K: WCPD: Take photos | 1 | 0 | 1 |
| **TOTALS** | 23 | 10 | **33** |

reserve' (re. refers to 'regarding') and 'Animals'. C1 Focus Group 1 (consisting of several community leaders) generated significantly more quotes than C1 Focus Group 2 (which had a high female representation), and had far more to say regarding lack of information/access.

### *B. Specifics: Knowledge of nature reserve*

#### *(a) Lack of access/information*

The code with the highest occurrence was 'Lack of access/info re. reserve' (nine quotes). Eight of these quotes came from C1 Focus Group 1 which comprised several community leaders. This could suggest that their positions of leadership made them more aware of the reserve and hence they had greater perception regarding lack of access and information. Six of the quotes touch on **lack of information** regarding the animals within the reserve (P332, 40:40; 90:90; 100:100; 166:166); opportunities for children and students to learn from the reserve (P332, 21:21; 34:34); and the lodges (P332, 20:20). Regarding the animals, sentiments expressed involved not knowing what type of animals were within the reserve, and how dangerous these animals were. Some examples follow:

> *"I saw a pamphlet at Wonderboom airport whereby they were mentioning we've got the Big Five. It's a pamphlet, but at Wonderboom airport. Far away from Kekana Gardens. So that is how I discovered there's Big Five in the game reserve"* (P332, 100:100).

> *"We don't know which kind of animals are there. Some don't even know there are animals in there …"* (P332, 40:40).

> *"… the management of Dinokeng should come to the community [with] a sort of roadshow. Some of our people are just disadvantaged. They can't read. They can see pictures and say 'oh, this is nice'. [Also] just to let them know there are dangerous animals inside"* (P332, 166:166).

> *"We've got school kids who are not exposed to the game reserve itself and the lodges. Those kids or any community member should have full information about the game reserve, how do they get access to see those animals, because this is going to help kids … to advance education-wise"* (P332, 21:21).

> *"How can I be the neighbour to the lodge, but I know nothing about these lodges, even their names?"* (P332, 20:20).

The other three quotes relate to community members **accessing the reserve** – the logistics, desire to see animals and to learn. Two examples follow:

> *"Especially ourselves staying at Kekana, we only see people coming from far away to visit those lodges. We don't know how, what are the procedures, what do we need to have so that we can go inside. What's going on inside?"* (P332, 21:21).

> *"… though we are closer to the lodge, we never see [the animals]. To my sight it's actually a crisis, because we should know about those things, [because] we are the people who are surrounded by those things …"* (P332, 20:20).

The absence of any quotes relating to 'Good communication between reserve and local community' provides further support to the theme emerging above. However, research in the area by Coetzee *et al.* (2013) showed greater awareness of being able to visit the reserve to see nature (regarding the statement, 'I can visit the nature reserve to see nature', 43% disagreed while 52% agreed).

***(b) Animals***

Adding to the quotes above which alluded to animals, participants showed awareness of the animals inside the reserve in another five quotes. One participant referred to *"animals living in there"* (P332, 18:18), while two referred specifically to the Big Five (P332, 20:20; P333, 29:29), with the latter quote being *"What I think I know about the game reserve is that it's dangerous to be there since there's Big Five"*. In contrast to the uncertainty expressed in the section above regarding knowledge of the presence of the Big Five, another participant listed several species that are in the reserve (such as giraffe and kudu) and indicated that local people do know it is a Big Five reserve (P332, 52:87).

***(c) What can people do there?***

In total, five mentions were made regarding what people could do inside the reserve (refer to codes in Table 4.3 with the prefix 'WCPD'), with four of these coming from Focus Group 1. This group contained more community leaders and could indicate that they are more aware of the reserve than other community members. Participants mentioned conferences and functions (P332, 150:150; 152:152), taking photos (P332, 118:118), and relaxing. Regarding the latter, a participant referred to *"others coming to refresh their minds"* (P332, 147:147), while another made reference to fun and play, looking at and learning about animals, and game drives (P333, 29:29). The latter was the only statement emanating from Focus Group 2 in terms of what people can do within the reserve.

***(d) Accommodation***

The code with the next highest occurrence (four quotes) was 'Accommodation', referring to knowledge of accommodation within the reserve. These references were to a lodge (singular) inside the reserve, for example: *"We know that this is a game lodge"* (P332, 20:20); lodges in the plural (P332, 40:40) and a reference to lodges and landowners (P333, 20:20). The fact that there are lodges, landowners and employees was also mentioned once under the code 'Make-up and history of reserve'. The one other comment under this code was *"It's a large place"* (P332, 18:18).

***(e) Desire to learn***

Three quotes were coded under 'Want to be educated on conservation' and these need to be considered in the context of other references made to learning within this question. Taken cumulatively, a strong theme emerges on the desire for information, access to go inside and to learn. Quotes mentioned above that create this context are P332, 40:40; P332, 166:166; and P332, 20:20. The three quotes on desiring to be educated on conservation follow:

*"… [Dinokeng] should be part of educating the community itself how to preserve the game reserve because it's of importance. It's their legacy. I mean, that's very important. So people must know how to protect the game reserve because they belong to the game reserve as well"* (P332, 35:35).

*"I hope they can help the local community. If we could get a good price, then we can go in and learn about them, interact with the nature reserve. Up to my age, I haven't seen a lion – only on TV"* (P333, 290:290).

*"What I know about the game reserve is … there's lots of things that you can learn, more especially when coming to those things of the Big Five animals … But our problem is, as the community that stays nearby, we don't have access to get in so that we can do some learning"* (P333, 34:34).

The desire to enter and learn appears to be strong and could increase the sense of the community belonging to the reserve and desiring to protect it. This sentiment is expressed above (P332, 35:35), despite most participants not having entered the reserve before.

***(f) Other***

The other codes occurred at a low frequency, but it has bearing on the study to mention the following: The code, '**Local community use the reserve for** …' differs from 'What can people do there' as it specifically asks how local people use the reserve as opposed to tourists. Only two quotes emerged on local use of reserve, with participants referring to weddings being held at lodges within the reserve (P333, 40:40) and nearby schools going in for activities (P332, 161:161).

Only one reference was made to knowledge of the **reserve providing jobs** and was more of a plea for employment: *"Our child must get the jobs there inside to help us for our children"* (P333, 40:40). However, the theme of desiring employment runs into the code on **knowledge of tourism** ('Tourism'). The two quotes here referred to locals wanting to be informed when tourists come, so that they can bring their art and sell it (P332, 45:45); and wanting to know how many tourists are coming. An add-on to the latter quote was that *"[Tourists] can contribute to the poor communities here because there are a lot of people who are not working, so those tourists can impact the community so that they can survive"* (P332, 23:23).

At this point in the analysis, resource access is not an issue. No quotes referred to resources which could or could not be accessed.

### *C. Summary: Knowledge of nature reserve*

Participants lack good knowledge of the reserve, in terms of what people can do there and how the community can use it. There is a clear desire for more information about the reserve and how it can be accessed. The participants acknowledged the reserve as a source of learning/education and they want to benefit from this aspect. They are aware of the animals within the reserve, and that it is a Big Five reserve, although there was some lack of clarity here. No mention was made regarding other aspects of

the environment. Participants seemed to be aware of the presence of lodges and landowners. It would appear that there is little knowledge of the reserve as a job creator.

Focus Group 1, which contained more community leaders had more knowledge of DGR overall – in terms of what goes on in the reserve. They were also more vocal regarding lack of information/access.

#### *4.3.1.2 Experience of nature reserve*

***A. Overview: Experience of nature reserve***

The data resulting from this question (Q6) are shown in Table 4.4.

Table 4.4: Code frequencies for 'Q6 Experience': DGR/KG

| | C1 | | |
|---|---|---|---|
| **CODE** (EX=Experience) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| EX: Catering | 0 | 1 | 1 |
| EX: Feelings expressed | 0 | 3 | 3 |
| EX: For: Animals | 0 | 1 | 1 |
| EX: For: Beach/swimming | 0 | 1 | 1 |
| EX: For: Parties/functions | 0 | 3 | 3 |
| EX: For: Relaxation | 0 | 2 | 2 |
| EX: For: Work | 0 | 1 | 1 |
| EX: Learn | 0 | 1 | 1 |
| **TOTALS** | 0 | 13 | **13** |

No single code stood out here. What is of interest is that Focus Group 1 did not participate in this question. Although Focus Group 1 consisted of several leaders who knew more about the reserve than those in Focus Group 2, no one in this group had entered the reserve. In Focus Group 2, four out of eight had entered DGR. In the earlier question on knowledge, this group had been less vocal, but when it came to experiences within the reserve, they spoke up. The highest frequency of codes went to the experience of parties/functions and positive feelings expressed about their experience (three quotes each).

***B. Specifics: Experience of nature reserve***

***(a) Who has been in and how often?***

In each focus group, the researcher asked who of them had entered the reserve before. As mentioned above, in Focus Group 1, none had entered the reserve (P332, 504:504); while in Focus Group 2, four out of eight had (P333, 450:450). Most community members do not have their own transport, which makes it harder to visit DGR.

***(b) Specific experiences***

There were three references to **parties** held at lodges within the reserve (P333, 459:462; 472:479; 554:554) and one quote relating to catering (P333, 500:501). From the discussion, this appeared to be the main reason why community members would enter the reserve. One example touches again on the learning aspect and looking at animals: *"You are free to have good parties. It works well. You learn more when you are inside. You can go on a game drive and you learn. You can do team building, cook for yourselves. Group work. You learn things"* (P333, 554:554). Other reasons were for **relaxation** (P333, 457:457; 465:468), to **swim** (P333, 500:500), and for **work** (the case of a crafter who had taken wares in for events) (P333, 484:484).

***(c) Feelings expressed***

The 'Feelings expressed' were in response to the question, 'Did you enjoy going into the reserve?' One participant expressed that lodge staff were pleasant and interacted respectfully with them (P333, 512:518). Another said she felt *"safer and more comfortable (inside) than in the local community because there is security there"* (P333, 541:541). The final quote under this code alluded to the silence and peace: *"It's quite nice. There's no noise there as we experience noise. Ja, no noise. We hear the birds and then a bit of singing"* (P333, 498:498).

***C. Summary: Experience of nature reserve***

Although only four out of 13 participants had been into the reserve, they were very positive about the experience, expressing enjoyment of the functions attended and what they could do inside. In addition, positive feelings were expressed, alluding to being treated well, the peacefulness, and sense of security. A visit into the reserve came across as being a real treat.

#### *4.3.1.3 Mapping*

Due to the nature of this question being quite different, the overview and the specifics are dealt with together.

***A. Overview and B. Specifics: Mapping***

The maps drawn by the two focus groups are shown in Figures 4.3 and 4.4. Focus Group 2 (where more participants had entered the reserve to attend functions at lodges) drew only slightly more detail for their community than for the reserve (P345, @638-@450). They were aware of several lodges inside (P345, @419-@280), and included the landmarks of the wall, gates, gravel roads leading into the reserve, as well as the river (P345, @464-@303). There was a sound grasp of the major highway and roads outside. No trees or animals were drawn. Focus Group 1, in which no one had entered the reserve, drew

Figure 4.4: Map drawn by Focus Group 2: DGR/KG




Figure 4.3: Map drawn by Focus Group 1: DGR/KG

a high level of detail for the community (drawing and labelling schools, orphanages, skill centre, cemetery, etc.) (P344, @489-@126), in contrast to the reserve being represented with minimal detail (only several bold trees) (P344, @135-@78). Key human-made landmarks on the periphery, namely the gates, reserve offices, and the wall were shown (P344, @233-@79). The minimal detail and complete change of style for the reserve part of the drawing could be indicative of the reserve being perceived as a completely unknown entity, separate from their own lives.

***C. Summary: Mapping***

For the group where half had been into Dinokeng, there is clear awareness of the lodges, but no representation of reserve features beyond that, such as trees, animals or rivers. This could indicate that their experience of the reserve did not extend beyond the lodges. For the group where no one had entered, the difference is marked. Their living environment is mapped in clear detail in contrast to the reserve, where the border landmarks of the walls and gates show, but the inside of the reserve is represented by a drawing of trees in a different style, possibly indicative of the reserve being seen as another world, unfamiliar to them.

Section 4.3.1 contributes towards answering Research Objective 2.

### 4.3.2 Relationship between community and protected area

Table 4.5: Orientation to Question 2-1: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q2-1 / R=Relationship | Y | | Tell me about the relationship between you and the nature reserve. How do you feel about living near the reserve? | FGI |
| | | Y | Tell me about your perceptions of the relationship between the local community and the nature reserve. | II |
| **Research Objective** | | | 3 | |

***A. Overview: Relationship between community and protected area***

Table 4.6 presents the data for this question.

More quotes emanated from C1 for this question (76 quotes from C1 versus 44 from C2). C2 provided many references to 'Actions taken/planned by reserve' (19 quotes), as opposed to two quotes from C1. However, five quotes from C1 indicate appreciation of actions taken by reserve. In addition, six quotes reveal C1's appreciation of the reserve itself. Fear of animals emerged strongly from C1 (22 quotes), but is only mentioned three times by C2. Amongst C1, lack of knowledge/information/access again emerges clearly (see Sections 4.3.1.1 and 4.3.1.3), in this case with eight quotes; along with the desire for

collaboration/communication (13 quotes) and a better relationship with the reserve (five quotes). The desire for collaboration came more from C1 Focus Group 1 which included several community leaders. This desire is also expressed far more by C1 (13 quotes) as opposed to C2 (three quotes). The request for conservation education also emerges again (five quotes). It is interesting to note that C1 dissatisfaction is not expressed in terms of being unhappy with benefits. This could relate to the historical context of a transitory new community who neither have the context of resource access (now denied), nor a history of interacting with the reserve.

Table 4.6: Code frequencies for 'Q2-1 Relationship': DGR/KG

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE** (R=Relationship) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| R: Actions taken/planned by reserve | 0 | 2 | 2 | 19 |
| R: Afraid of animals | 15 | 7 | 22 | 3 |
| R: Animals seen as food | 0 | 0 | 0 | 2 |
| R: Appreciate actions taken by reserve | 3 | 2 | 5 | 0 |
| R: Appreciate reserve/resources | 4 | 2 | 6 | 0 |
| R: Desire better relationship with reserve/local community | 0 | 5 | 5 | 0 |
| R: Desire collaboration/communication | 10 | 3 | 13 | 3 |
| R: Difficult to define community | 0 | 0 | 0 | 6 |
| R: Dissatisfied with benefits | 0 | 3 | 3 | 5 |
| R: Lack of knowledge/information/access | 5 | 3 | 8 | 3 |
| R: References to poaching | 3 | 3 | 6 | 1 |
| R: Relationship is fair to good | 0 | 1 | 1 | 2 |
| R: Request conservation education | 3 | 2 | 5 | 0 |
| **TOTALS** | 43 | 33 | **76** | **44** |

Coetzee *et al.* (2013), in their research in the area, found that 71% of participants had lived near Dinokeng for less than 20 years, indicating that most of the community is fairly new to the area. They also found that residents who had been in the area longer, participated more in reserve related programmes, because of increased exposure to them, and had more positive perceptions of DGR. The data from this present study must be considered in the light of the fact that all the landowners interviewed, clearly gave the overall impression of wanting to improve the relationship with the community. The high number of actions taken and planned by the reserve for the future supports this.

### *B. Specifics: Relationship between community and protected area*

#### *(a) Fear of wild animals*

This was the most prevalent theme emerging (C1:22; C2:3). Eight quotes from C1 expressed the emotion of fear in general, for example *"It's very scary because even at night sometimes you hear those animals*

*crying … Yes. It's very scary"* (P332, 182:182). Some of these quotes related to specific animals, namely monkeys (P333, 120:120; 128:128) and the monitor lizard [*"It's like a crocodile, but the small one"* (P333, 133:133)]. Three of the eight quotes related to concerns regarding the wall surrounding DGR. It appears that C1 are unsure of the effectiveness of the wall in keeping away wild animals. One of the crafters who works just outside DGR commented, *"… I'm not sure about that fence that is surrounding this game reserve, because there's dangerous animals inside there. So sometimes I used to be scared that maybe when I wake up I'll find a lion in front of my house, because it looks like that fence is not electrified. Especially near where I am now because I'm [working just outside] Dinokeng Game Reserve. … So to me sometimes it's too dangerous to stay next to the dangerous animals while that place is not secured"* (P333, 67:67; 78:78). Another participant suggested the following: *"And the other thing that [DGR] need to do on their part – against that wall, I think they should open about a three metre road so that we can see the footprints of the dangerous animals if they come this side …"* (P332, 367:367).

A further eight quotes related to fear, but were focused on the problem of snakes coming out of the reserve. This seems to be a real issue for the community, and many snakes are killed as a result.

> *"Because you see this drought, I'm not sure how many snakes have been killed by now, some big snakes like pythons and other snakes because … the land is dry. So when [the snakes] feel that heat they go outside and they go to the people"* (P332, 211:211).
>
> *"I myself, I'm staying just against that wall. So maybe in the week we can kill [snakes] – though it's not permissible - but for my safety, maybe one or two per week"* (P332, 212:212).
>
> *"For me it's great to be [next to] the game reserve but sometimes I have a fear … I see many snakes coming from the game reserve [over the wall] - maybe five per week. It's dangerous for the children. … usually we'll kill five snakes per week. And children can't play and they're scared of snakes"* (P333, 108:113).

Van Niekerk (2007), in her study of vegetation and land use in Kekana Gardens, also identified the community's fear of snakes, which causes residents to remove natural grasses and sweep dirt areas clear to be able to detect snakes.

This fear is also cultural. One participant said *"It's a devil"* (P332, 287, 287), while another commented that *"we black people when we see a snake, actually we see a very dangerous thing [that] must be killed"* (P332, 285:285). A C2 participant (now working in DGR, and living in a community nearby) also alluded to the influence of upbringing and culture on one's attitude to animals, stating that *"… based on our culture … we were taught not to be too friendly to animals. And I think because of the lack of understanding that we have, and how we go about connecting to the ecosystem, … we withdraw from actually having any relationship with [animals], because we feel that it's dangerous to have any contact … Yes – not to be close to any animal [except when the men hunt], rather run than be around it"* (P339, 32:34). Another C2 interviewee introduced a further angle, highlighting the need for poverty alleviation and education to bring about positive mindsets regarding wildlife and conservation:

*"Historically European communities had a conservation culture over years due to the fact that they've had access to resources. You can't tell me, 'it's in our blood. It's in our bones'. No, no, no, it's in your purse. My father had the means to take me around. Your father had the means to buy a caravan and take you camping. … You can't say 'this ethnic group loves travel and this doesn't love travel. These love conservation, these don't like conservation'. … if you've got money you won't poach. If you don't have money you will poach. If you've got money you will spend it at a lodge. … So if you up the education, … your community are better qualified. That makes them a candidate to become a tourist and a conservationist"* (P348, 208:212).

Four quotes coded under fear of animals related to the desire for communication and information. Participants wanted the reserve to inform them regarding how safe the community is from the reserve, and what protection was offered by the reserve (P332, 228:228); what to do if animals came into the community (P332, 238:238); and requested education regarding which animals are dangerous and what to do (P332, 268:268; P333, 140:140). Three examples follow:

*"If need be, appoint people from our side and train them so that if these kind of animals have jumped to our side they should act before calling them, because you know you can call someone who comes after one hour … So they should … workshop them on how to act in case an animal has crossed the wall. … But none of those things are happening in our village"* (P332, 238:238).

*"We are living with those things … That is the key – to have knowledge of those things, how dangerous they are, which ones are not dangerous so that we can deal with them. They must ensure safety"* (P332, 268:268).

*"If the people of this game reserve [could] ... try to teach our people about this. … a sort of school, you know? Where we can learn about these animals, so we will know which one is dangerous, which one is not dangerous …. I think that will be better"* (P333, 140:140).

Finally, the need for information and education comes across in two quotes which demonstrate misunderstanding concerning a game reserve and the animals within. One participant suggested that the dangerous animals could perhaps be caged (P332, 299:299); while another who stays near the wall referred to being especially afraid of the tigers and lions (P333, 118:118). Being a South African reserve, there are no tigers.

***(b) Actions taken/planned by reserve***

In the case of Dinokeng, some projects are collaborative (between landowners), while others are implemented by individual lodges. The founding documentation of DGR makes provision for a Community Trust where a portion of money accrued from the sale of game will go to the community. However, the amounts envisaged are relatively small and will not reach individual households, but will rather contribute to community facilities/projects (P338, 155:155). While this is being formalised, a Community Development Trust has been set up to drive community projects (P338, 161:161).

The 21 references to 'Actions taken/planned for the future by reserve' reveal that several valuable community beneficiation initiatives are in place. The two quotes from the community showed

awareness of the initiatives spearheaded by the management of Kwalata Lodge (renovating churches, creches, etc. via their guest programmes; and assisting with funerals, food supplies, etc.). Apart from these, C1 were unaware of further initiatives.

The projects mentioned by C2 include distribution of seeds by landowners to encourage vegetable gardens (P343, 40:40); providing jobs to community members when lodges are being built (P343, 46:46); distributing food parcels and blankets to 67 needy people for Mandela Day[9] (P343, 68:70); football tournaments (P343, 74:74); building a frail care facility (P348, 145:145); developing education via science, accounting and maths programmes (P348, 151:151), including hosting a science expo (P348, 27:27); revamping day care centres (P348, 23:23); and assisting community members with entrepreneurship partnerships (P348, 242:242; 248:248). Future projects mentioned were the development of a solar farm which could provide cheaper or free electricity to the community and have potential future financial benefits (P338, 170:171); and setting up a soup kitchen (P343, 68:68). The soup kitchen began in 2016 (Dinokeng Game Reserve, 2017), after data collection for this research.

It is important to note that some of the landowners view Dinokeng as a partnership between them and the community, with joint discussion of current needs, and a close working relationship between them and the block leaders, particularly the All Blocks Chairperson. This is evidenced in some of the quotes below.

> *"We've got an opportunity of donating a portion of land that will feed into the grid, and over a 20-year period, you will start getting real benefits. Millions of rands' worth of hire for that piece of land. … linked to that will be the electricity supply to the community … cheaper … if not free electricity as [a] tangible benefit. Again, maybe not money in everybody's pocket, but certainly community projects, upscaling of schools, equipment, material"* (P338, 171:171).

> *"Dinokeng was started with the community to uplift the community and to give job opportunities, but the community grew a thousand times bigger than it was. [When] lodges are built, the landowners really try to get the locals for doing the jobs, like builders and carpenters and plumbers and electricians"* (P343, 46:46).

> *"We sit together. We ask what is needed from the community. … for Mandela Day, we asked … 'We'd like to do something, what is needed?' And then they said, Mandela Day is 67 minutes … they're going to find 67 needy people … to get a food package … and they said everything that they wanted to be in there. So that we don't buy and say 'we think you need this and this'"* (P343, 68:70).

> *"… you can't just preach education, but people don't have basic services. So we have focused a lot over the last ten years"* (P348,149:149.

> *"We're very active in terms of community investment … Tourism [provides] the opportunity to positively develop a community and also indirectly due to the fact that tourists come to a conservation area"* (P348, 21:21).

9. Mandela Day is celebrated each year in South Africa on Nelson Mandela's birthday (18 July). Since he spent 67 years fighting for social justice, that number is used as a guideline for the amount of time, money or items that people can donate on that day to improve the lives of others.

*"We've got the opportunity through tourism to direct clients' spending and to [make] a difference in the community. If you look at what we've started to offer our clients instead of … paintball shooting, you … can go and paint a day care centre. It's more a constructive type of fun activity and a nice investment back to the community … Instead of having a night dinner [at the lodge] you can have your dinner in the community …"* (P348, 23:23).

Linked to the above is the community's response to these actions. C1 provided five quotes relating to '**Appreciate actions taken by reserve**'. Two participants mentioned job creation via selling crafts (P332, 352:352) and the craft centre that was built: *"The good part on the side of Dinokeng – they gave us a building [craft centre]. I appreciate what they did for us"* (P333, 235:235); while another mentioned employment in general and the advantage of not having to travel far to work (P332, 341:341). The other two refer to donations:

*"Even the tourists they are coming and when the game reserve [gets] a lot of money, they are coming to us and donate something. … and when they do conservation clubs, we are getting something over there"* (P332, 347:347).

*"We had a successful Mandela Day ... Dinokeng went to elderly people. This was done together with us – a joint venture"* (P333, 254:254).

***(c) Desire collaboration/communication***

In this section, the quotes for the codes of 'Desire better relationship with reserve' and 'Relationship is fair to good' are also discussed because they link to collaboration/communication.

The code for **Collaboration/communication** emerged 13 times for C1, and three times for C2. The information collected here links back to the desire for communication mentioned in the section on 'Fear of wild animals'. To analyse the quotes within the code 'Desire collaboration/communication', the researcher will begin with those from C2, which demonstrate the intent and philosophy of some of the landowners to work with local people. Practical initiatives contributing to collaboration are evident in the section above. One of the landowners stressed their commitment to work hard at this relationship and to skill people (P348, 202:202). The other two quotes follow:

*"I think that the constant growth of the people around here (it's not a static community – people [come] in from Zimbabwe and other places), [causes] immense pressure on the outside, and the reserve is just seen as available land. And I think it's very important to reach the permanent community so that they can communicate to people who are transitory that the reserve has value"* (P338, 206:206).

*"What we've been doing for 30 years … It's a philosophy. It's a way of life. The Ubuntu principles – that's basically how we've been [running]. We always see ourselves as part of the community. We don't see ourselves as part of greater Pretoria. We're part of Hammanskraal"* (P348, 33:33).

Emanating from the community focus groups, six of the quotes relate to communication in general, five to communication regarding the wall and animals, and two touching on inter-cultural interaction. For **communication in general**, participants are asking those involved in the reserve to *"… teach us how to*

*communicate with them"* (P333, 284:284), stating that *"… communication is important*" (P333, 324:324). Another participant expressed frustration at outsiders being hired for jobs, and wanted more communication from leadership so that people in the community with the right skills could be matched to jobs (P333, 83:83). The desire is there to work together and understand each other, as is evidenced in the following three quotes:

> *"… we should have access to their information … and they too must have our information … so that we can have a common movement. Common relationship. More importantly working towards the safety of the community, the safety of saving and servicing the game reserve itself, because we have to form part of preserving the nature reserve …"* (P332, 236:236).

> *"For them to fit the community with information is a boost for them, because if I go to Johannesburg, those people ask me where I come from. I tell them. So it's like I'm selling the game reserve … But if [the reserve] hides the information from us, … they fail the nature reserve itself. They and us together must [market DGR]"* (P332, 474:474).

> *"… Our relationship is not good with the game reserve. And I think they are the very same people who should come and then inform us so that we can relate together"* (P332, 228:228).

The quotes on the **wall and animals** reflect the sentiments expressed in the section on fear of wild animals. An example is *"The people … they don't like snakes. They will keep on killing and then the game reserve doesn't want us to kill those animals, but we are the one having a problem"* (P332, 251:251). One participant stated *"They should interact with us so that we can know and understand those animals that are there and how to act in case one is coming …"* (P332, 266:266). Another asked for a call centre that they could report to if wildlife escapes (P332, 258:258).

Finally, on **inter-cultural communication** with tourists, one participant talked about *"… experiencing new faces, new races, that we can meet so that we can know how's the world outside. They're going to explain to us where and how they're living. Like we're talking to … different kind of people …. I mean, that's nice …"* (P332, 350:351). Another quote expresses one response of tourists visiting their community … *"They have never seen the shack … They see it here in our community … some of them are surprised to see somebody sleeping in a shack"* (P332, 354:354).

The codes below are discussed in this section due to their link with collaboration/communication. Under the code '**Desire better relationship with reserve**', five quotes emerged. Some participants acknowledge a good relationship with the desire for more, while others say the relationship is poor. Two relate to Kwalata Lodge as setting an example which the rest of the reserve can follow, for example: *"I wish that the game reserve should learn from Kwalata because [the lodge owner's] involvement in the community, it's a success. For example [he] would invite the crèche people to come into his place, you know, hold functions and so forth. But the game reserve itself is distancing itself from the community"* (P333, 203:203). Others refer to wanting more of a relationship, for example: *"When you talk about the good relationship, I was hoping that we can have more. I know that we've got it, but we can extend [it so] that we have a more good relationship between the owners [and] leadership of Kekana Garden [and*

*the leaders of] the [other] areas … near the game reserve"* (P333, 83:83). Relating to this, three comments were coded under '**Relationship is fair to good**'. Little is said here, but a C1 comment was that the relationship is good, but they desire improvement (P333, 83:83). The other two quotes came from C2, with one expressing caution when claiming a good relationship since it's complicated by the political climate and people's expectations (P348, 153:153), and the other stating *"I think we are on our way to a good relationship, but it takes time … and a lot of … trust. We have to build up trust … So we're getting there. I am very positive and we're working on it"* (P343, 74:74).

***(d) Lack of knowledge/information/access***

The eight quotes from C1 under this code reflect lack of information regarding access, animal control, dangerous animals, job opportunities, and the link between poaching and relationship. The three quotes from C2 reflect the challenges of managing this relationship – population growth, complex dynamics and the fact that DGR is a young reserve which will take time to establish. The different sub-divisions mentioned within this paragraph are emphasised in bold below.

On **access**, C1 participants commented that they were unaware of the cost (P332, 326:326) and of the fact that the first hour inside the reserve is free (P332, 329:329). Another example links access, information on dangerous animals and relationship: *"I think they should be interacting with us, letting us get inside [and] ask [about] the animals, and then they should tell us how dangerous the animals are and how to act in case the animals have jumped over. But if [we] don't know, the relationship won't be good …"* (P332, 228:228). On **animal control**, both quotes related yet again to snakes and confusion around their management. One mentioned a python killing someone's chicken. The participant had heard that animals had tracking devices put on, and was wondering why the python didn't have one, and if indeed tracking devices were being used (P332, 246:246). The other participant expressed that Dinokeng landowners were collecting dangerous snakes from elsewhere and putting them into the reserve for the visitors (P332, 270:270). The quote on **jobs** touched on people that came from far away being employed (P333, 83:83). Although references to **poaching** have their own code, the two quotes here link this back to relationship:

> *"So how can you support something you don't know about? And even those people they don't know that if they poach they are doing wrong. Because there's no relationship"* (P333, 163:163).

> *"Within our community they think that when you talk about poaching, you talk about a rhino, not being aware that illegal hunting is actually poaching. So that education needs to be spread across"* (P333, 182:182).

Much of the above points to the need for clearer communication, which can assist in building a better relationship.

C2 quotes provide another perspective. One interviewee mentioned the burgeoning **population**, which was far smaller when the reserve started, and that it is not possible for everyone to be employed (P343,

41:41). The reserve manager referred to the **complex dynamics** of the situation, and that it is difficult for the community to understand this (P338, 91:91). Another lodge owner voiced one of the many challenges as follows: *"The problem here is [the local community] get told a story now [by politicians]. You don't get told it's going to take 20 years to get there. So that is a challenge. And then also remember, … elders in communities pass away. … now the next [person] walks in. He doesn't have a clue what's going on here"* (P348, 131:131).

***(e) Dissatisfied with benefits***

As stated in Section 4.2.4, the Kekana Gardens community is fairly new to the area. At this stage in the analysis it appears that, due to the historical set up, this community does not think mainly in terms of benefits and being dissatisfied with benefits. It is interesting to note that of the eight quotes under this code, five come from C2 and only three from C1. The C1 quotes all relate to the non-employment of locals, bemoaning the fact that non-locals or foreign nationals are employed (P333, 148:148; P333, 83:83), while the third quote also links unemployment to poaching: *"Because they don't hire [from] our local community, that is why those people who are not working at this moment … go to poach inside there. … There's no relationship between the game reserve and the community. We want to stop those things as well if they hire the people. Then the people will protect the animals ..."* (P333, 156:157).

The C2 perspective reveals a community which is disappointed, with unrealistic expectations of employment and the time that it will take to build DGR up to a point where it can provide more benefits. Government attention and funding is positive, but also takes time, leading to delays which can cause the community to feel disillusioned with DGR. The first quote touches on the problem of defining the local community, and the second on unrealistic expectations:

> *"… a lot of promises were made to the community that could not be fulfilled, and it has led to a lot of dissatisfaction. Because we're not a recognised tribal area, we don't have a tribal chief and … a tribal structure, defining the community has been next to impossible. And until we can define the community, we cannot open trust accounts, we cannot negotiate, we cannot make promises. So I reckon the biggest feeling in the community is one of disappointment and confusion …"* (P338, 91:91).

> *"… the youngsters don't want to start with a small salary and build it up. They want to walk in with a good salary. It's just a change, a shift of mind. … where people used to slowly gain it, you want it now. And unfortunately, conservation takes time. It takes time to build the destination. It takes time to build the brand. … that's what we signed in for – destination building and all the advantages, but it just takes time. You can't squeeze it ripe"* (P348, 125:125).

***(f) Appreciation of reserve and actions taken by reserve***

For the code '**Appreciate actions taken by the reserve**,' three of the five C1 quotes related to employment, referring to the advantage of working close to home (P332, 341:341) and earning money from crafts (P332, 352:352; P333, 235:235). The other two quotes referred to donations from tourists and the reserve running conservation clubs (P332, 347:347), and the Mandela Day joint venture (P333, 254:254). The study conducted by Coetzee *et al.* (2013) in the nearby Rust de Winter area found that

game lodges had provided an economic boost to this community, with 35% of respondents directly involved in the game reserve, either by working in accommodation establishments or as tourist guides.

**Appreciation of reserve** related more to an intrinsic valuing of nature. Four of the six comments made by C1 referred to feelings, such as *"It's great to be [next to] the game reserve"* (P333, 108:108); *"It's good"* (P332, 320:320); *"Like me staying next to the game reserve I feel relaxed, I feel free. You see the sounds of the birds and stuff makes you stress free"* (P333, 62:62); and *"I … enjoy it. … I'm just against the wall. Sometimes I just take my step ladder and just [look] in so that I can have the view of the reserve …"* (P332, 367:367). Other quotes mentioned the value for children of seeing wild animals (P332, 326:326), and the importance of conservation, for example: *"[It] is good to live near the game reserve … for nature conservation. … there are some trees that are important for the people so we need to take care of them"* (P332, 341:341).

This appreciation of the reserve and understanding of the importance of conservation also emerged in the research of Coetzee *et al. (*2013). They found that the following percentages strongly agreed on certain statements: DGR is good for conservation – 59%; DGR brings about the survival of plant species – 61%; I have learnt about the importance of nature through the reserve – 66%; and I am happy to stay close to DGR – 69%.

***(g) Animals seen as food and references to poaching***

Both these themes have already emerged in previous discussion. Two comments were coded under 'animals seen as food' and seven under 'references to poaching'. Regarding **animals as food**, the researcher has already mentioned the cultural context which could influence attitudes to nature. Another quote by a C2 participant cast further light on this: *"the people think that the animals, if it's not a pet, the animals belong to God and that means it belongs to everybody … and of course a lot of people don't have a job and are very poor, so they come and poach and then sell it at the market"* (P343, 51:51).

Six of the seven **references to poaching** came from C1. The link between poaching and the relationship with the reserve has already been covered. Taken in totality, it would appear that poaching for bush meat is fairly common. One participant even issued some advice to hunters: *"… so you can go all out hunting [but] it's going to be dangerous, so it's just for the people to stay cautious of that"* (P332, 184;184). Two other comments referred to hunting of bush meat not being seen as a crime, as opposed to poaching rhino. Killing of rhinos is viewed with disdain and concern by one participant: *"This irritating thing of rhino poaching – I think it's quite disturbing. … That one is something that should be dealt with ... because if they keep on killing the rhinos then there will be a time whereby the rhino will be no more, and then it will be history for the up and coming young generation …"* (P332, 454:454).

Regarding confronting those they know are hunting, a C1 participant voiced fear, stating *"because we will become a target at the end of the day"* (P333, 174:174). However, as mentioned by a C2 participant,

it would appear some community members do volunteer information: *"… I've had a lot of information from community members phoning me and informing me about poaching, because of the relationship, they know they can trust you. I think that's very important"* (P348:295:295).

***(h) Difficulty defining the local community***

This challenge of defining the community has been addressed in previous quotes and is coded here six times (all from C2). To summarise, it is a significant challenge for C2, due to the historical context of not having a recognised tribal structure. The block system with block chairpersons does provide some structure, which DGR management are encouraging (P338, 149:149). The following quotes illustrate the challenge:

> *" … we've taken Ward 73, which is a government demarcation [as] our identifiable community. But inside Ward 73, there are so many factions that you can't just take a government, political ward, and because there's no [formally recognised] chief, no one rallies around the same people. So it's not just the fact of distance [from the reserve]".* (P338, 148:148).

> *"I'm in the community committees and we meet every second week to … set up a good relationship with the community, but this is not so easy, because 'who is the community'? … that's Ward 73, but Ward 73 is so huge that we said we, as Dinokeng, we're going to start a relationship with this [Kekana Gardens] community at … Tau Gate, because these are the ones that we see almost every day, because we are going in and out"* (P343, 26:26).

Another concern was the expectation of funding emanating from the Community Trust in future, but the size of the community precludes any substantial benefits emerging:

> *"… There is a community trust, but as soon as [the people] hear 'community trust', they think it's a lot of money, but there is no money in the trust. It's [only] if the game reserve makes money ... The trust is for the community and then again who is the community? Ward 73 is bigger than the whole game reserve is! … again, the political stuff, it's not in our hands to do something …"* (P343, 271:278).

***(i) Desire for conservation education***

Finally, under the question on relationship, there were five clear requests from C1 on education regarding conservation and the animals. Two of these quotes referred to teaching regarding which animals are dangerous and what to do if you spot one (P332, 276:276; P333, 140:140) as per a previous discussion. The others simply indicated a desire to learn. Suggestions included making videos for young and old (P332, 282:282); providing information in the créches regarding what the 'Big Five' means, so that children learn from a young age; and to *"teach the people [that] if you come and jump the wall and chop the trees down then you affect the environment as a whole and you affect your own life and the animals …"* (P332, 341:341).

***C. Summary: Relationship between community and protected area***

Due to the historical context of a community moving into the area and a newly established reserve, in this question, C1 did not demonstrate a benefit-seeking mentality. However, the desire for employment

emerged as well as frustration when non-locals were employed. C1 participants had a very real fear of wild animals, predominantly snakes. Snakes are a regular problem, and several are killed per week. The community's cultural context influences their relationship with wildlife. The landowners interviewed, are intent on investment into the community. Several initiatives are underway or planned for the future. The community did not seem aware of the specifics, mentioning only job creation (mainly through crafts), Mandela Day and the initiatives of Kwalata Lodge. Participants appreciated initiatives they were aware of, as well as of employment gained. A few community members acknowledged an intrinsic enjoyment of nature and the importance of conservation. C1 and C2 were both keen on more collaboration and a better relationship. The community participants were very clear in their wish for more two-way communication with the reserve; a sense of being part of its conservation and success; education/information on dangerous animals and how to handle these situations; information on access to the reserve; and education on animals and conservation in general. Poaching appeared to be closely linked to relationship, with an apathy towards illegal bush meat hunting (not always seen as illegal by C1), but an interest in working to improve this, should there be a better relationship. Education could assist here. C2 noted the constraints of a large ill-defined community where benefits cannot spread far; a reserve in its infancy which requires time and good success before more benefits can materialise; political dynamics; and unrealistic expectations of what can be achieved via the Community Trust.

Section 4.3.2 contributes towards answering Research Objective 3.

## 4.3.3 Positive and negative changes that protected area has brought to way of life

Table 4.7: Orientation to Question 3-2: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q3-2 Pos changes<br>Q3-2 Neg changes /<br>PC=Positive changes<br>NC=Negative changes | Y | | How has the reserve changed the way you live (positive and negative)? How have things changed? | FGI | Positive changes (Section 4.3.3.1)<br>Negative changes (Section 4.3.3.2) |
| | | Y | How do you think the reserve has changed the way the local community lives (positive and negative)? How have things changed? | II | |
| **Research Objective** | | | 4 | | |

### *4.3.3.1 Positive changes*

***A. Overview: Positive changes***

All data pertaining to positive changes mentioned by C1 and C2 at Dinokeng Game Reserve are captured in Table 4.8.

Table 4.8: Code frequencies for 'Q3-2 Positive changes': DGR/KG

| CODE (PC=Positive Changes) | FOCUS GROUP 1 | FOCUS GROUP 2 | C1 FOCUS GROUP 1 & 2 | C2 INDIVIDUAL INTERVIEWS |
|---|---|---|---|---|
| PC: Community projects | 0 | 0 | 0 | 2 |
| PC: Education/training | 1 | 0 | 1 | 7 |
| PC: Employment | 1 | 1 | 2 | 4 |
| PC: Environment is being conserved | 0 | 0 | 0 | 1 |
| PC: Exposure | 2 | 0 | 2 | 0 |
| PC: Facilities and infrastructure | 3 | 0 | 3 | 4 |
| PC: Inter-cultural contact | 1 | 1 | 2 | 0 |
| PC: Personal enjoyment of reserve | 0 | 2 | 2 | 0 |
| PC: Pride | 1 | 0 | 1 | 0 |
| PC: Property value | 1 | 0 | 1 | 0 |
| **TOTALS** | 10 | 4 | **14** | **18** |

For the C1 focus groups, 14 quotes were supplied. Of the 15 codes created for this question, eight were used in coding the Dinokeng focus group responses. Although no codes are used numerous times, several positive changes were acknowledged by C1, with 'Facilities and infrastructure' receiving the most mentions. Other positive changes mentioned more than once were 'Employment', 'Exposure', 'Inter-cultural contact' and 'Personal enjoyment of reserve'. Most quotes came from the first focus group which had several community leaders (C1 FGI 1:10 quotes; C1 FGI 2:4 quotes).

The C2 interviews revealed 18 quotes, making use of five of the codes. Emerging strongly was 'Education/training' followed by 'Facilities/infrastructure' together with 'Employment'. Comparing C1 and C2, there was no major difference in the extent of the perception of positive changes due to the reserve's presence (C1:14; C2:18), but there was a difference in terms of what was noted as positive changes. They appeared to concur that there was a positive change regarding 'Facilities and infrastructure', but C2 had more to say about 'Education/training' as a positive change than C1 (C1:1; C2:7).

### *B. Specifics: Positive changes*

#### *(a) Education/training*

Only one comment was made by a C1 participant but it echoed a sentiment that has emerged in several questions – that of a sense of the importance of nature and joint custodianship thereof: *"And then the other important thing is that we were very much a disadvantaged community but now it's like people are getting to know what the game reserve is all about. So a little bit of education is now getting into the people … Now as time goes by people will more and more know how to protect the nature reserve itself, because that to me is their legacy as well"* (P332, 410:410).

The C2 quotes addressed the education/training initiatives underway or being planned. The reserve will be using local radio for community liaison and a school outreach programme has been started. By reaching school children, hopefully adults will also be reached (P338, 103:103). In addition, the Honorary Rangers have developed a booklet in seven languages which will be used for school children (P338, 105:105). Kwalata's science, accounting and maths support programmes, run with support from corporate clients, were also mentioned (P348, 149:149; 151:151), as well as a programme where children from the community are treated to a bush experience (P348, 151:151). Equipping people with skills via tourism in the reserve also emerged and indicated the success that can be gained: *"… let's say this guy was working with cattle, but his child is now a barman. … I think tourism gives you a tremendous stepping stone in life in gaining skills, people skills. And … if you look at how many guys have exited us from the community, and those youngsters today are on Mango Airlines, some are in FNB, some are in Joburg, Pretoria, successful [people] …"* (P348, 172:172).

Finally, one C2 interviewee referred to a government training programme: *"… The government is doing some courses now. They asked all the landowners what our staff need. … they set up learning programmes … and we can send our [staff] and [the government] pays for everything – for staying overnight, food and training. Everybody gets a certificate and I think this is a very good idea. People can also come there who don't have a job yet. So if somebody says 'this is what I want to do', then they can get trained …"* (P343, 105:105).

***(b) Facilities and infrastructure***

This code received a total of seven quotes (C1:3; C2:4). C1 mentioned the upgrading of the area from rural to urban [*"Yes, it did change because … we are no longer like those people from the rural areas. We are now urban …"* (P332, 405:405)]; the road [*"Our road from N1 to the game reserve has been developed. … they make sure it looks nice because we are having these people from far away that should use the road …"* (P332, 412:412)]; and the firefighting base which is now much closer [*"… they brought out … firefighters because the government is concerned about those animals. If there is a fire, how many animals are going to suffer? Before … you had to wait for those people for a couple of hours. By the time they come there is nothing left. So that's the advantage, because they're bringing those people next to us"* (P332, 444:444)]. These quotes show that some C1 participants do see changes brought about for the sake of the reserve, as being to their advantage. It should be noted that all three of these quotes emerged from Focus Group 1, which had several community leaders.

Of the four quotes from C2, three mentioned government attention to the area due to the presence of DGR. All three are included below. Two C2 participants voiced that local people may not connect the increased government spending in their area with the presence of the reserve. However, the C1 quotes above show that some community members are aware of this and see it as positive change. The fourth C2 quote concerned the frail care facility built with donations from tourists.

*"I don't think the reserve has had any impact on the way they live at all. … [but] because of the game reserve and the government eye in this area, they have received things like sewerage, electricity, roads, which they would not have received if it was just an ordinary squatter community on the perimeter of Pretoria. So they have received tangible benefits from the government, but they would not be able to see that it is because the government were doing Dinokeng, that they received that attention"* (P338, 97:97).

*"So conservation areas create a red zone in terms of budget spending … If this community was ten kilometres further down the road they would not have got a clinic built of 60 million. They wouldn't have a brand new school, 60 million. There's another school coming up of 60 million"* (P348, 192:192).

*"There was emphasis on RDP houses first here, before the community … down the road get. … So I think that is one thing … which communities don't realise – why they get and others don't"* (P348, 194:194).

***(c) Employment***

Employment attracted mention with two quotes from C1 and four from C2. C1 both mention that some people are employed within the reserve, for example, *"And then our neighbours, some of them are working in there. Their family are now starting to get life, so it's good"* (P332, 385:385). The C2 comments concerned building skills in local people, who can then go on to be successful elsewhere, and assisting in establishing entrepreneurial partnerships (P348, 172:172; 244:244). One participant raised the problem of retaining staff. The leader of the block groups is currently setting up a database of the skills of local people, in order for landowners to rapidly be able to employ a local with the relevant skills. The final quote relates to the challenges, but importance of employing locals: *"[It] is more difficult [to only employ locals]. It's very nice to just head hunt a guy and put him in place and he comes from wherever. … I personally believe it's not sustainable because tomorrow the guy just jumps over to the next place. [But] the community's got an interest here. He lives here. His family is here. His kids are here. So … you've got a more stable factor"* (P348:49:49).

***(d) Other***

The rest of the codes had low frequencies of quotes (one or two). Those pertinent to the research are mentioned below. Under the code **'Community projects'**, a C2 participant made mention to small-scale initiatives that have been started to reach out to the community, for example, *"One of which is the vegetable gardens along the fence line. We had a lot of vandalism of this fence. So we approached the mature ladies of the community and invited them to put up their vegetable gardens [there]"* (P338, 101:101). This project has been a considerable success.

Community participants also noted the positive changes of **increased pride** [*"So now we are exposed to the game reserve. We are no longer focusing on the Kruger National Park. We've got our own. So we're very proud of that"* (P332, 383:383)]; **increased property value** [*"It also gave our village a value. … buying a piece of land in our village is going to cost a lot of money because of this nature reserve. … that's good because next coming ten years if I think of relocating because I'm tired of hearing the voices of the lions,*

*I know I'm going to get a lot of money"* (P332, 390:390)]; and **personal enjoyment of the reserve** for relaxation and functions (P333, 270:274). **Inter-cultural contact** also emerged as a positive change with one participant saying it was *"nice"* to chat to visitors (P332, 400:400), and another saying: *"In the festive season a lot of people come … when you get in there you meet many people, tourist people and South Africa people"* (P333, 277:277). Connecting with this is the positive change of **exposure**, where a C1 participant stated: *"I think one other positive thing is that it's good that people from faraway now they know our village by coming to the game reserve. Before they didn't know there's Kekana … And from my side I experienced fresh new culture I didn't see in my life because the people pass here. So I can just see them live, rather than on TV"* (P332, 372:372). Another comment was that *"Even some celebrities they come here. Even the politicians, they hold meetings here. But if there is no game reserve no one would come here"* (P332, 381:381).

Good inter-cultural relations also emerged in the study by Coetzee *et al.* (2013) where 65% strongly agreed that there were good relations between residents and tourists; and 58% strongly agreed that there was good exchange of cultural relations between the two groups.

Finally, in terms of environmental conservation, a single telling quote arose from C2, which offers hope and inspires perseverance for ventures such as DGR. This quote refers to wildlife that increased naturally (due to the natural habitat being restored), over and above the game that was translocated into DGR: *"In terms of conservation it's a success story. I mean, there was no honey badgers. There was no aardvark. There was no fish eagles. I'm talking about game that wasn't brought in. It's always nice to say there was no Big Five, now they are here. But you know, nobody brought in a honey badger. Nobody brought in a fish eagle. Nobody brought in ant bear, warthog, leopard, brown hyena. I mean the amount of pangolins. … nature has got the most amazing ability to bounce back, recoup. So, the moment you can create that natural environment and you take away poison, people, domesticated animals – suddenly it just comes back. The type of birds we see that's back … I know it because I've been here all my life. If I see a warthog I go 'wow' … There wasn't warthog [and] they weren't brought in"* (P348, 161:161).

### *C. Summary: Positive changes*

Overall, C1 and C2 focused on different aspects when answering this question. C2 were vocal regarding 'Education/training', followed by 'Employment' together with 'Facilities and infrastructure'. C1 also had quotes coded under all three of these, but there is no further overlap. C1 quotes clustered in lower frequencies around the **less obvious intangible positive changes** such as enjoyment of reserve; inter-cultural contact; and increased property value, exposure and pride. C2 mentioned several positive education/training initiatives underway (particularly for school children), but C1 were barely vocal in this regard (C1:1; C2:7). The two employment quotes from C1 acknowledged employment as a positive change; while the four C2 quotes were split between the positives of improving skills and

entrepreneurial partnerships, and the challenges of retaining staff and employing locals. Initiatives are being set in place to improve the latter.

Although C2 expressed doubts about C1 being aware that the area has benefited due to government attention **because** of the presence of DGR, some C1 participants did realise the reason for certain benefits accruing to them. However, this acknowledgement came from participants in the focus group comprising several community leaders.

Although frequencies of codes for C1 are low, cumulatively they show that C1 acknowledged that the reserve brings other positive changes such as exposure of Kekana Gardens residents to different cultures, and a reason for outsiders to visit the area. It is clear that both constituencies recognised that positive changes have occurred (C1:14; C2:18).

#### *4.3.3.2 Negative changes*

***A. Overview: Negative changes***

Section 4.3.3.1 dealt with the positive changes under Q3-2. This section covers the negative changes, with the data presented in Table 4.9.

Table 4.9: Code frequencies for 'Q3-2 Negative changes': DGR/KG

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE** (NC=Negative Changes) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| NC: General | 1 | 0 | 1 | 0 |
| NC: Lack of access to natural resources | 3 | 5 | 8 | 1 |
| NC: Lack of access to reserve | 2 | 2 | 4 | 0 |
| NC: Lack of information and contact | 1 | 0 | 1 | 0 |
| **TOTALS** | 7 | 7 | **14** | **1** |

C1 produced 14 quotes, using four of the seven codes. Focus Group 1 and 2 produced the same amount of quotes (seven each), with no marked differences between the codes used. For C1, 'Lack of access to natural resources' had the most quotes (eight), followed by 'Lack of access to reserve' (four).

For this question, C2 generated only one quote, under 'Lack of access to reserve'. This could suggest a marked difference between C1's perception of negative changes in contrast to that of C2 (C1:14; C2:1). Comparing this to positive changes (C1:14; C2:18) in Section 4.3.3.1, C1 equalised with 14, but C2 reported 18 positive changes in contrast to one negative change. This could indicate the need for C2 to identify with the negative changes and losses perceived by C1, although the single quote from a C2 participant demonstrated in-depth understanding of these changes and their impact.

***B. Specifics: Negative changes***

***(a) Lack of access to natural resources***

While access to natural resources did not emerge in preceding questions, nine quotes were mentioned here, with eight coming from C1. The negative changes related to loss of access to firewood and healing waters, according to traditional beliefs.

The C2 quote summarises the issue: *"The biggest impact has been on the water. The water in the river here, particularly at the Pienaars River Bridge, was seen as a source of healing. And that has been closed to them. They are able to make appointments to go and see graves. They are not allowed to collect any of the resources that they used to get – thatch, medicinal plants or anything like that, because of the Big Five and we don't have enough staff to escort them in. Where possible, we assist, but it's really closed down. It has had a big impact on them. … There are no people attempting to breach the ban, so they've made other plans. But I would reckon, particularly from the people who were making money out of the thing, that there would be animosity, but we don't see it or hear about it. They haven't laid formal complaints or come to make applications …"* (P338, 109:111).

Three C1 quotes related to not being able to collect firewood. This example suggests that some are trying to do so: *"… before they start the game reserve, people who cannot afford electricity would go inside to chop firewood, but right now it's difficult for them because … they … encounter some problems where they leave their wheelbarrows there, their axe. When they see the animal they just run away. It's dangerous for them"* (P332, 370:370). Three further quotes relate to the healing waters. Two examples follow:

> *"Even the religious people you see … We normally went to the river to perform certain rituals … but since the game lodge has been there, everything is difficult. They don't allow you to travel by foot that side, only cars you see"* (P332, 439:439).
>
> *"Our churches also used to use the waters there ... the rivers for baptisms"* (P333, 319:319).

Another C1 quote mentioned lack of access to water: *"We can't get water. Water in the river"* (P333, 296:296). The final quote from C1 was a request for access to these resources again, understanding of the differences *("because we are different")* and good communication with community leaders in this regard (P333, 324:324).

Lack of access to natural resources emerged here for the first time, not in the context of access to animals (since these were not there before the reserve was established), but in the context of firewood, healing waters and water usage.

***(b) Lack of access to reserve***

All four quotes coded here are from C1 and relate to no longer being able to walk through the area. Three examples follow, which touch respectively on a sense of exclusion (yet accessibility for others), cost implications and the inability to walk into DGR to seek work. It is important to note that most people in this community would not have their own car.

> *"Because time before I would have a chance just to travel here and back without being restricted. I was ... doing that. So I think it's a negative thing because [now] I can see only people are coming from far away"* (332, 460:460).

> *"But normally our people who stay around here were working on those farms there. They were travelling easily. So now you [can't] travel there unless you are using a bus or a taxi, which is adding to our expenses. You can't walk to work …"* (P332, 466:466).

> *"If you're looking for a job, you can't go [due to the Big Five]"* (P333, 302:302).

***(c) Other***

The C1 quote coded under 'General' related to a sense of not benefiting sufficiently (P332, 414:422). The final quote linked to '**Lack of information and contact**', again touching on a sense of exclusion, with others having access and information, but not them: *"… it has changed negatively because the game reserve itself doesn't provide [the surrounding residents] with information … They should let us know when are the special events. … give us special treatment: 'Okay, guys, during this month … you'll be allowed for free to do one, two, three, four'. … People from far away know the exact time of coming to view. They know – this month we'll be able to see the birds ... this month we can go to do this ... but we'll not get information on that, …and we are residing around the game reserve. So I don't think it's a good thing … [We need] information at large … it might be on employment opportunities or events or stuff like that …"* (P332, 460:460).

***C. Summary: Negative changes***

Most quotes here, with 14 out of 15 being from C1, dealt with being unable to access certain natural resources, and unable to walk through DGR any longer due to the Big Five.

When viewing this data in its totality, the researcher's overriding perception is a sense of exclusion on the part of C1 participants: exclusion from natural resources which they would like to utilise; exclusion from entering the reserve (because they cannot do so on foot); and exclusion from knowing what is going on and the best times to visit. They see others enjoying/entering DGR, but not themselves. The C2 quote does show detailed insight into negative changes wrought by the reserve on C1. However, the lack of further references to these by C2 could indicate a need for C2 to identify more with the negative changes perceived by C1, and for landowners to assist in this regard where possible.

In comparing positive changes to negative changes, C1 are equally vocal about both (fourteen quotes for each); but C2 are more vocal on positive changes. The fact that C1 do not perceive more positive changes than negative changes is concerning, as it can impact attitudes and behaviour towards the reserve.

Section 4.3.3 contributes towards answering Research Objective 4.

### 4.3.4 Increasing positive attitudes towards protected area

Table 4.10: Orientation to Question 4-3: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q4-3 / MP=More positive | Y | | Some people like this nature reserve and the animals. Some people think there are better ways to use this land. What would make you more positive towards the reserve being here over the next 100 years, that is, down to the time of your great-grandchildren? | FGI |
| | | Y | What do you think would make the local community more positive towards the nature reserve being conserved in the future? | II |
| **Research Objective** | | | 6 | |

***A. Overview: Increasing positive attitudes towards protected area***

The results for this question are presented in Table 4.11.

Table 4.11: Code frequencies for 'Q4-3 More positive': DGR/KG

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE** (MP=More Positive) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| MP: Basic needs | 3 | 0 | 3 | 2 |
| MP: Community projects | 1 | 0 | 1 | 1 |
| MP: Development/infrastructure | 0 | 0 | 0 | 1 |
| MP: Employment | 2 | 2 | 4 | 3 |
| MP: Enjoyment of reserve | 0 | 0 | 0 | 5 |
| MP: Information/education | 4 | 3 | 7 | 3 |
| MP: Involvement/interaction | 2 | 2 | 4 | 2 |
| MP: Other | 1 | 2 | 3 | 0 |
| MP: Training | 1 | 0 | 1 | 1 |
| **TOTALS** | 14 | 9 | **23** | **18** |

There do not appear to be significant differences between C1 Focus Group 1 and 2, except that Focus Group 1 made more references to meeting basic needs as an aspect that would make them more positive towards DGR. These were mentions of where donations/support was required, and it could be that with more leaders in this group, they had a greater awareness of community needs. Both C1 focus groups were most vocal regarding information/education as something that would help build positivity, while C2 said less on this topic (C1:7; C2:3).

C2 were most vocal about enjoyment of the reserve (five quotes) as an aspect that can increase the positivity of the local community. It is interesting that there were no C1 quotes here. However, C1's answers to other questions indicated a desire to enter DGR and know more about it. The few participants who had been in, thoroughly enjoyed it and gave the impression that it is a real treat. Both C1 and C2 had a similar number of quotes under the codes 'Basic needs', 'Employment' and 'Involvement and interaction'. Another point of interest is that, apart from 'Development/infrastructure' and 'Enjoyment of reserve', C1 and C2 quotes were coded with the same codes, suggesting concurrence on what will increase positivity towards DGR.

The code 'Other' is not considered in the reflection above since it contained several themes (see Point 'f').

***B. Specifics: Increasing positive attitudes towards protected area***

***(a) Information and education***

This code returned the most quotes (C1:7; C2:3). For C1, this code has the highest number of quotes. Four of the seven C1 quotes involved a general request for information/education; two linked specifically to desiring knowledge on animals; while the last quote expressed that they do not know how many lodges there are (P332, 492:492). It emerged that the community want to understand/be taught why the reserve/animals are important, and that this knowledge will help people to be more positive towards the protected area. These quotes revealed no animosity towards the reserve, but a genuine desire to learn about it and be part of it:

> *"If you give me information, it will help. I understand that you protect animals and me – not only animals. I know you value me"* (P332, 482:482).
>
> *"Information is the bottom line. Education is essential and this will explode from village to village"* (P332, 481:481).
>
> *"There's also the question [that is being asked] around the community – 'okay, here's our game reserve, why don't we benefit from that game reserve?' … So at least if they are teaching our kids about the reserve, and community people are working inside …, it will improve communication between the reserve and us. Then I can say ... 'I want to communicate with these people or maybe do things the way they do … [And] those kids can teach others. So that we can say, '… we know about these things now, the game reserve is important for us'…"* (P333, 339:339).
>
> *"I think it's very hard to protect what you don't know. If we know those people who are owning those things, if we know the animals, then it will be easy for us to protect it. You can't just tell someone they must protect it, but they don't know about the game reserve. We need knowledge …"* (P333, 334:334".
>
> *"… Once we know … the animals, [then] we know how the animals are important …"* (P333, 330:330).

The three C2 quotes are all direct acknowledgement of the above-mentioned need – that knowledge/understanding/education are important, for example:

*"Once the educational level is addressed, obviously then the conservation kicks in"* (P348, 232:232).
*"… if people were to receive the knowledge, the understanding. To understand what it is all about"* (P339, 73:73).

It is positive that C2 were aware of this need, but they may not be aware of the extent to which C1 themselves were requesting it.

***(b) Employment***

In terms of total number of quotes, the code 'Employment' had the second largest amount (C1:4, C2:3) (C1 also provided four quotes under 'Involvement/interaction', while C2 had three for 'Information/education'). The C1 quotes all requested employment as an aspect that will increase positivity, while two mentioned the problem of non-locals being hired. Examples follow:

*"They are hiring people from outside ... they need to prioritise locals"* (P332, 493:493).

*"Coming back to unemployment. If they can employ people from the area, there will be less crime"* (P333, 605:605).

One of the three C2 quotes acknowledged this problem: *"… To start off with – don't employ foreign people"* (P348, 200:200). Perhaps this issue needs to be addressed amongst landowners, even if it is the harder route. The C2 participants involved in this study were trying to employ locally, but perhaps other landowners are not as intent on this. The remaining C2 quotes related to locals wanting jobs (P338, 115:115) and attempts to help local artists involved in the D'Nokasi[10] project with marketing, but pointing out that different mentalities complicate this (P343, 128:129). Under the code 'Training', a C2 participant empasised the need for individual responsibility to be taken by community members in terms of earning a living: *"… if we still keep on helping where we can, but educating, saying: '… this is your own responsibility, … yes, you don't have money and we can help', but the bigger picture has to be, I teach you how to fish and you go and fish. It's not about [me] giving you the fish every day"* (P343, 155:155).

***(c) Involvement/interaction***

This was another prominent code for C1 (C1:4; C2:2). All four quotes are provided below as they indicated, in the words of the people, the need for contact as a means to increase positivity. The first quote also linked to a theme emerging across several questions, namely that of a sense of ownership of the reserve. It would be positive to strengthen that.

*"Don't be afraid to come and talk to us ... we want to be more active and involved. These animals belong to us"* (P332, 481:481).

*"The DGR must communicate with us. Radio can be used"* (P332, 485:485).

10. D'Nokasi refers to an artists' cooperative operating from Tau Gate, Dinokeng.

*"I think the best will be if the landowners of the game reserve … come talk to the people. They must [have] public participation, so that we must know each other. Once we know each other I think everything will be good"* (P333, 330:330).

*"We hear about the chairperson of the game reserve. …. We have never met [him]. We can't see him. We don't even know him … it's like these people they are inside, very far from the community"* (P333, 345:345).

A quote from C2 revealed that some landowners are genuinely intent on fostering interaction: *"We go out of our way to … to speak to people, to interconnect with them. The women along the fence line that are using the vegetable gardens have had a total change of attitude. They wave when we go past and they're thrilled. I walk with my dog, regularly, up and down the line. I inquire how they are, … how they're feeling. You need to talk to the people"* (P338, 130:130). The final C2 quote from the same participant acknowledged the need for C1 to feel ownership: *"If they can get that sense of ownership, they will actually be able to brag to other people that they've got a Big Five game reserve on their doorstep …"* (P338, 113:113).

***(d) Enjoyment of reserve***

Five quotes emerged here, all from C2. They mentioned the self-drive route and picnic site due to open. Some of the challenges involved were mentioned, as well as the belief that access and the ability to see the animals can change attitudes amongst C1. The power of access and enjoyment of DGR as an attitude changer is touched on in the following three quotes:

*"Part of the government development is Phase 2 of our self-drive route, and part of that is a picnic site. … if they realise that they could actually visit, … bring their families and come and see the animals … They seem to think it's an 'us and them' scenario. They don't realise that they can just drive through the gates and go on a game drive. … If they can get that sense of ownership … the knowledge that the doors aren't closed, needs to be very strongly communicated to them. … They don't know how to utilise it [but] a picnic site is tangible. If you say to somebody in Hammanskraal who's got no … transport, that you could come on a self-drive route, it doesn't mean anything … But if I say to them, 'there's a picnic site and you can come and have a braai and you can come sit down there', that might start opening a little bit, but we'll know when it happens, next year [referring to 2016]"* (P338, 113:113).

*"I just strongly believe that if people can realise that the doors are open and that they can participate in what is happening inside the fences, it will change attitude"* (P338, 117:117).

*"The staff have definitely reacted to seeing animals for the first time, to be able to learn to identify them. … the day they actually see [an elephant], that sense of awe and the fact that the animals really are here. That word is spreading and that has a very positive effect – that it isn't just a made-up story …"* (P338, 130:130).

The challenges of being a young game reserve were also mentioned. The picnic site took longer than anticipated due to budget constraints, which affected the construction of the fence and gates. The participant ended off by saying *"… by then you have lost hope. And face. You're losing face because the community was told, 'oh you know what, it's accessible' but now it is not"* (P348, 236:236). The same

participant also mentioned the importance of marketing the picnic site to local people: *"Remember 60% to 80% of the community walk with their feet and drive with a taxi. So the point is accessibility. Make it accessible, and if we say accessible, it is actually just to market it*" (P348, 234:234).

***(e) Basic needs***

Both C1 and C2 acknowledge the meeting of basic needs as something that can aid positivity towards the reserve (C1:3; C2:2), but the narrative also casts light on the immense challenges involved in this regard. Two C1 quotes mention assistance for *"sick senior citizens"* (P332, 494:491) and *"donations for orphans and granny's"* (P332, 487:487). The importance of food is mentioned in both a C1 and C2 quote, the C1 participant commenting on the irony of going hungry when there is a rich food supply nearby: *"It's like working in a restaurant, but you stay hungry all the time"* (P332, 483:483). Two C2 quotes are almost direct responses to this: *"… you can talk airy-fairy as much as you like, but they want meat. So we've got an initiative where we do try and provide meat at a low cost that has come from the reserve, but it's very small amount that we can provide. So we don't want to set up an expectation, because you don't want to create another set of false promises"* (P338, 115:115); and *"… if you've got money you won't poach. If you don't have money you will poach …"* (P348, 208:208).

These quotes show the practical challenges and impossibility of meeting the basic needs of the large population on the reserve's doorstep. Initiatives can assist in alleviating some hardship, but DGR is limited in what it can achieve in this regard. Poverty and poaching are also connected once again in the last quote above.

***(f) Other***

The remaining quotes occured in low frequency, but are mentioned if they illuminate the main themes of this research. Under '**Other**', learning from Kwalata (this has emerged previously) was mentioned by C1, and the uncertainty of the fence security: *"Initially they expected the game reserve to be secure. But the electric fence is not working. People are scared. What if a lion comes? Hence they don't like it. If the reserve electrifies the fence, it may change the local people's minds"* (P333, 431:431). This is not the first quote to touch on this insecurity, which could be addressed with information and assurances (if possible) of the level of safety offered by the barrier.

Interestingly, '**Community projects**' did not emerge as a major mind changer within this question (C1:1; C2:1), but it is worth noting that the C2 quote here illustrated the success of the vegetable garden venture. The participant mentioned the importance of talking to the people and the researcher then asked if they have seen a change in attitude. The response is: *"Absolutely – such a simple thing, a vegetable garden"* (P338, 132:136). This indicates that simple do-able initiatives can become solutions, contributing towards improved attitudes towards protected areas.

The single quote under '**Development/infrastructure**' outlined a potential attitude influencer – but one which is affected by government. The Klipdrift School is located within the reserve, and is still running. The Gauteng Government has promised a new larger school, which will be outside the game reserve and will replace the current school. However, delays have occurred and may be affecting relationships: *"We have had positive meetings with [Gauteng Government], but it's taking a long time and … until that new school is actually here, there's going to be a resentment that we've taken that land away. So I think if the school was there and we could be seen to have participated in getting the school, it will be a big plus towards community feeling"* (P338, 119:125).

### *C. Summary: Increasing positive attitudes towards protected area*

There was a clear request from C1 for information/education as well as involvement/interaction. They desire this, because by knowing more, and interacting more they will understand the importance of the reserve/animals; and they really want to understand. There appears to be a genuine desire to be part of it. C1 want to respect the reserve, but need knowledge and interaction first. By interacting more, they will feel more involved. They want to know the people inside. The research by Coetzee *et al.* (2013) also found this, with 87% feeling a strong attachment to DGR; 92% reporting a positive feeling towards DGR and 91% saying that what happens in DGR and surrounds is important to them. 62% showed willingness to invest talent or time to make DGR a success.

C2 was aware of the need for information/education and involvement/interaction, but perhaps not aware of how much the community themselves desired and requested this.

C1 indicated that employment will help. There was dissatisfaction that non-locals are employed. This appears to be an issue that landowners need to address as this perception creates negativity towards DGR. The C2 quotes regarding employment were more of a mix, with no single theme emerging.

The power of enjoying and accessing the reserve as a means to increase positivity was clear from C2. It emerged in the previous questions that locals were unaware that they could enter, but that the few who had entered had enjoyed it. C2 were aware of this lack of knowledge and want to address it. Marketing is important here. C2 also touched on the sense of exclusion felt by locals, and believed that participation and enjoyment of DGR can be a powerful attitude changer. Although C1 did not comment here, the previous data revealed their clear desire to enter and enjoy the reserve.

Meeting basic needs is an impossible challenge, which C2 can only slightly alleviate. C1 mentioned donations for the elderly and orphans, and the problem of hunger; while C2 talked about an initiative where meat is provided, and acknowledged that where poverty is present, poaching will occur. No easy solutions are available here, but simple initiatives such as the vegetable gardens can improve local people's livelihoods and change attitudes.

While government attention and funding is very helpful, C2 discussed the lengthy time frames that can cause the reserve to lose face (for example, the fencing and gates for the picnic site) or intensify the perception that land has been taken (for example, the Klipdrift School). The issue of how secure the wall/fence is, was raised again by C1 in this question, and needs to be addressed/communicated by C2. In a follow-up interview with one of the landowners, it was mentioned that the effectiveness of the boundary fence is negatively affected by vandalism (cuts in the fence).

Section 4.3.4 contributes towards answering Research Objective 6.

### 4.3.5 Others' views on protected area

Table 4.12: Orientation to Question 5: DGR/KG

| **Question ID / Code prefix** | **To C1** | **To C2** | | **Method** |
|---|---|---|---|---|
| Q5 / OV=Others' views | Y | N | What do your friends and family think about this reserve? | FGI |
| **Research Objective** | | | 3 | |

***A. Overview: Others' views on protected area***

Table 4.13 depicts the data for this question. This question was not put to C2 because it aimed to gain a wider understanding of community views regarding the reserve, heard from the community themselves.

Table 4.13: Code frequencies for 'Q5 Others' views': DGR/KG

| **CODE** (OV=Others' Views) (Neg=Negative) (Pos=Positive) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
|---|---|---|---|
| OV: Neg: Fear of animals | 0 | 2 | 2 |
| OV: Neg: General | 1 | 1 | 2 |
| OV: Neg: Want employment | 0 | 1 | 1 |
| OV: Neg: Want information | 1 | 1 | 2 |
| OV: Neg: Want land | 0 | 1 | 1 |
| OV: Neg: Want resources inside | 0 | 2 | 2 |
| ***TOTALS FOR NEG:*** | ***2*** | ***8*** | ***10*** |
| OV: Pos: But want general assistance | 1 | 0 | 1 |
| OV: Pos: But want involvement | 0 | 1 | 1 |
| OV: Pos: But want to see animals | 1 | 0 | 1 |
| OV: Pos: But want to learn | 1 | 1 | 2 |
| OV: Pos: General | 2 | 0 | 2 |
| OV: Pos: We get employment | 0 | 1 | 1 |
| ***TOTALS FOR POS:*** | ***5*** | ***3*** | ***8*** |
| **TOTALS** | 7 | 11 | **18** |

The views of others expressed by Focus Group 1 were less negative as well as more positive than those from Focus Group 2. Although this question asked participants for the views of **others**, this pattern is still of interest. Focus Group 1 comprised more leaders, and they could be more positive overall because they have greater knowledge of the reserve. In total, there were ten quotes expressing the negative views of others and eight revealing the positive views of others. For Focus Group 2, the higher number of negative quotes (eight), and lower number of positive quotes (three) is concerning. For the remainder of this discussion, Focus Group 1 and 2 will be discussed together.

Out of 13 codes developed for this question across all three case studies, 12 were used to code the responses of the C1 focus groups in the DGR/KG case study, generating 18 quotes in total. The codes 'OV: Pos: General' and 'OV: Neg: General' related to general statements regarding being negative or positive. The other codes reflected a negative attitude about a specific aspect (for example we are negative **because** we want information, i.e. we lack this at present) or a positive attitude (for example, we are positive **because** we get employment or we are positive **but** want to learn).

Code frequency was low throughout, with quotes scattered rather evenly between codes and never rising above a frequency of two. The codes which have two quotes in total are discussed first, followed by those with one, but only if the quote has relevance to the main research themes.

***B. Specifics: Others' views on protected area***

***(a) General negative statements***

For general negative statements, C1 reported that *"Most people are not in favour …"* (P332, 498:498); and *"The people I know – they don't like it"* (P333, 404:404).

***(b) Negative because of fear of animals***

One quote was a personalised comment and not the views of others per se: *"For me, we don't like the game reserve. It's scary"* (P333, 398:398). The other related to a theme emerging previously, namely a sense of insecurity regarding the boundary between community and reserve.

***(c) Negative because desire information***

The two quotes here connected lack of information to negativity, and reinforced a recurring theme:

> *"People are not going to love something they don't know about, but they might go for it if they have information"* (P332, 499:499).
>
> *"This is why people don't like it. There is ignorance – no proper explanation for the local people"* (P333, 431:431).

***(d) Negative because want the land for other purposes***

The two quotes provided under '**Neg: Want resources inside**' focused on the desire to have what is inside the reserve. One quote was general: *"They don't like the name 'game reserve', but they like what is inside there"* (P333, 421:421); while the other was more specific and referred to living from the land being easier than working for money: *"… about 50% of my friends, they don't like the game reserve [because] people don't want to work. They want the meat. They want herbs from that land. They want firewood … for them to wake up early in the morning and go to work, come back, buy meat, buy those things – it's harder. But … for them to just go there with a bow and arrow – it's not hard"* (P333, 418:418).

Linked to this desire to use the land for other purposes is the quote provided under the code '**Neg: Want land**': *"… they didn't want the nature reserve. They want the land for houses"* (P333, 394:394).

***(e) Negative because want employment***

Although only one quote is coded here, it should be mentioned in the light of references (under other questions) to the need for employment and the negativity caused by the employment of non-locals: *"… the people staying around our area – most of the people wouldn't like it, because when we go around our community they say, 'we've got our game reserve but we are not working in there. [Landowners] just … hire people from far'. Our … grandmothers, they say 'our kids are not working, our grandfather is not working, but we've been left out of there'. If the game reserve could hire people, people would be more positive"* (P333, 413:413). The researcher again acknowledges the reality that a small reserve in its infancy cannot employ a large number of locals. However, the perception of non-locals being hired needs to be addressed, as this issue continually surfaced.

**(f)** ***General positive statements***

These quotes suggested that the majority of people known to participants were in favour of DGR: *"Most are in favour"* (P332, 496:496); and *"People like the game reserve – they are in favour of it"* (P332, 497:497).

***(g) Positive but want involvement and education***

Several other codes related to the theme of people being positive but wanting more interaction and educational opportunities. Participants referred to school trips being important (P332, 501:501); wanting to learn: *"Yes [they are positive], but the problem is that we need to learn about this game reserve"* (P333, 360:360); and wanting to see animals: "*They are positive. It will be good if the local people can go and watch the animals*" (P332, 500:500). The final quote belonging here was one which expressed majority support but desired more interaction: *"… we are anxious to see this game reserve work, but unfortunately there are people who are supposed to come to us and lead us on that [but they're not]. We want this game reserve. We want it"* (P333, 349:349).

***(h) Other***

Finally, one participant was positive because of the employment gained: *"From my side, the game reserve is number 1. It is a relief. People used to spend transport money to go work in Centurion. Now they work here – it's easier. We are very happy"* (P333, 409:409). This quote reflects the significant difference that employment makes to quality of life, and then attitude.

***C. Summary: Others' views on protected area***

This question was only put to C1. Focus Group 2 are more negative and less positive than Focus Group 1, which comprised more leaders. In total, positive and negative comments were fairly evenly spread. In general, some were positive and some were negative, and it is impossible to determine whether the direction of the opinion of others swings more to the positive or negative side. With low frequency of quotes under each code, no single theme dominated here.

On to the specifics, participants reported fear of animals and distrust of the fence. Reassurances and security is required here. Negativity was also linked to lack of information (in the words of one participant – "*People are not going to love something they don't know about"*)*;* the desire to use the land for other purposes (namely, utilising natural resources and for housing); and lack of employment combined with resentment that non-locals are employed.

Regarding positive views, only one was directly positive – the change in life due to employment nearby, while the other quotes all had 'buts' attached and related to being positive but wanting more interaction, involvement and educational opportunities. These range from simple requests such as being able to see the animals, to the importance of school trips and interacting with reserve staff/landowners. The strong wording of some quotes provides hope, such as *"we are anxious to see this game reserve work"* and *"we are very happy".* Regarding interaction, in a follow-up interview with one of the landowners, it was mentioned that the reserve stakeholders do go out and engage at community meetings. The challenge is that only certain people attend these meetings, although some are open to all. This means that information is not always widely disseminated.

Section 4.3.5, together with Section 4.3.2, contributes towards answering Research Objective 3.

## 4.3.6 Responsibilities towards protected area

Table 4.14: Orientation to Question 7-5: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q7-5 / RP=Responsibilities | Y | | Do you have any responsibilities for this reserve? If you do, how do you feel about these? | FGI |
| | | Y | Do the local community have any responsibilities for/towards this reserve? If they do, how do you think they feel about these? | II |
| **Research Objective** | | | 5 | |

### *A. Overview: Responsibilities towards protected area*

Table 4.15 outlines the data collected for this question from C1 and C2 participants.

Table 4.15: Code frequencies for 'Q7-5 Responsibilities': DGR/KG

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE** (RP=Responsibilities) (LC=Local Community) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| RP: LC have no responsibilities | 0 | 0 | 0 | 2 |
| RP: LC protect reserve | 3 | 4 | 7 | 0 |
| RP: Who to report to | 3 | 2 | 5 | 0 |
| **TOTALS** | 6 | 6 | **12** | **2** |

C1 contributed far more to this question than did C2 (C1:12; C2:2). Only three of the seven codes (developed across the three case studies) were used when coding the data and no significant differences emerged between Focus Group 1 and 2. 'LC protect reserve' had the highest frequency of quotes (seven), followed by 'Who to report to' (five). All these quotes came from C1, and mainly referred to local people taking action to protect the reserve; and the problem of not knowing who to report to if an issue arises (for example, an escaped animal or person jumping the wall). The two quotes provided by C2 both related to C1 not having any responsibility towards DGR. It is interesting that, judging from the data, C1 do feel a sense of responsibility (which is encouraging), whereas C2 felt that C1 do not have any responsibility towards the reserve.

### *B. Specifics: Responsibilities towards protected area*

#### *(a) Local community protect the reserve*

Seven mentions of protective actions by local people emerged here, all of them from C1. The quotes related to feeling a sense of responsibility towards the wall, and are a mix of motives, including protecting the reserve from criminals/poachers; protecting the people from escaped animals; and protecting people from harming themselves. It is important to note that most quotes expressed more than one motive, but six out of the seven demonstrated concern for the reserve, and contained the motive to protect the reserve. This is significant. In the examples below, the clear intent and sense of responsibility is evident:

> *"I live just next to the wall. If someone messes with my wall ... I must confront and act. I have a responsibility for that line"* (P332, 509:509).

> *"When an animal comes out of the reserve, I must protect it, because I want my child to see it. I can't allow them to kill it. I don't know who to call, but I will make a plan"* (P332, 510:510).

> *"I as [a community leader] make sure people don't jump the wall. If an animal jumps, I call the police. I'm responsible for those people jumping the wall"* (P332, 513:513).

*"Our responsibility to the game reserve is to make sure that we protect [it] so that criminals don't have a gap to go inside. … and we must make sure that … we get that communication with those landowners – that fence … must always be electrified"* (P333, 588:588).

*"Most people will know that they must protect the wall, so that snakes and wild animals can't come over"* (P333, 609:609).

*"No one told me to do it [protect the wall], but since I'm one of the community leaders, I feel that it is the right thing to do (for myself and others)"* (P333, 642:642).

***(b) Local community have no responsibilities***

The two quotes under this code possibly reflect differing understandings of responsibilities. C2 could have been thinking of official/formal responsibilities when answering this question, whereas C1 appeared to have an inherent self-imposed sense of responsibility. This is positive for the reserve. Educational opportunities could tap into this and encourage this sense of custodianship (albeit mixed with self-protection). One C2 participant answered '*No*' to the question of whether the community have responsibilities (P338, 138:138), while the other participant said: *"… I must think, I must put myself in the shoes of the community and I can't see where a community can say 'I've got a responsibility'"* (P348, 242:242).

***(c) Who to report to***

Under this code, four of the five quotes revealed uncertainty on the part of C1 regarding who to call when a problem occurs in terms of an animal escaping or someone illegally entering DGR. Only one participant was certain what to do: *"There's a guy by the name of … who heads the rangers. Last week a hyena got lost next to my house and we called [him]. … I definitely know the person that's involved"* (P333, 613:613). However, this same participant acknowledged later in the quote that *"[Yes], we need to share that at meetings"* (P333, 618:618). One participant alluded to the telephone number being at the gate, but that some people don't know it: *"There are boards at the gate regarding who to call. I see it on the gate, but some don't know. [The boards] are also at Klipdrift"* (P332, 512:512). Others said they did not know who to call (P332, 510:510; 511:511), and another stated *"We must know the man, because one day I will see the lion in front of my house. I cannot call – once I called [the leader of the block system] to give me the number of that person, but it [can] take a long time"* (P333, 627:627). In Focus Group 2, the researcher asked for a show of hands if participants knew who to call, and four out of eight did. This could be fairly easily addressed by distributing cards with the number to those living near the wall. It could also be covered in educational initiatives. It goes further than just providing a number – by having this information, residents may feel more empowered (encouraging custodianship) and feel less at risk, which could result in fewer animals, especially snakes, being harmed.

***C. Summary: Responsibilities towards protected area***

C1 clearly felt a sense of responsibility and wanted to know who to report to should there be a problem that endangers either the reserve or the community. C1 participants clearly felt responsible for the wall

bordering the reserve, and although they are also concerned for their own safety, the majority of quotes showed the desire to protect DGR. This is positive, especially considering that this sense of responsibility is self-imposed and not expected by the reserve. C2 reported that the community do not have any responsibilities, but they are probably referring to formal ones, and are perhaps unaware that some local people do indeed feel this sense of responsibility.

C1 also revealed that there is some uncertainty regarding who to call if there is a problem. An escaped animal can potentially be life-threatening to locals. It is essential for a good relationship that local people feel safe and empowered regarding who to call and what to do.

For the sake of both the people and the reserve, this sense of custodianship and empowerment should be encouraged in educational initiatives. This may encourage a feeling of ownership and of having a part to play, which could impact on attitudes.

Section 4.3.6 contributes towards answering Research Objective 5.

### 4.3.7 Benefits due to having protected area near your home

Table 4.16: Orientation to Question 8-6: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q8-6 / B=Benefits | Y | | What are the benefits of having this reserve near to your home? Which of those benefits are most important to you, which are least important? | NGT |
| | | Y | What are the benefits to the local community of living near this reserve? Which of those benefits do you think are most important to them? Which are the least important? | II |
| **Research Objective** | | | 4 | |

The analysis tools used for 'Q8-6 Benefits' and 'Q9-7 Losses' were different because these questions involved the use of NGT where C1 participants generated notes; while the same questions were put to C2 in the form of individual interviews (as per the previous questions) (refer to Appendix E for details). For NGT data collection, Focus Group 1 and 2 joined together. Each note was captured as a separate document and coded within that document in Atlas.ti. Forty-three documents were produced from the 43 notes generated at Dinokeng. Twenty-five of these relate to 'Q8-6 Benefits' and 18 relate to 'Q9-7 Losses'.

The questions on benefits and losses have three sections each, namely the **category**, the **category place**, and then the **specific benefits and losses** (Sections 4.3.7.1 to 4.3.7.3 respectively for benefits; and Sections 4.3.8.1 to 4.3.8.3 respectively for losses).

***A. Overview: Benefits due to having protected area near your home***

The benefit categories were initially determined by the participants. When the researcher developed the coding system for this question, she coded the benefit categories to a finer level of detail. Both are discussed below.

In terms of the category place (or ranking), the top three benefits, as determined by C1's ranking were employment opportunities, tourism and knowledge of animals, and sponsorships and saving money. In contrast to the other two case studies, C2 interviewees felt they could not rank benefits, except for one participant.

Moving away from the ranking to specific benefits, C1 mentioned more benefits than C2, with C1 highlighting 12 types of benefits, and C2, eight. In total, C1 produced 25 notes containing benefits, while C2 had 15 references in total to benefits (in the interviews). The codes receiving the most quotes for C1 were employment (9) and learning/training about animals (4). C2's top counts were for 'Employment' (4) and 'Learning/training: about environmental awareness/education' (4).

#### *4.3.7.1 Benefit category*

All the benefits that C1 participants generated (each one written on an individual note) were pasted onto a large flip chart page by participants, who then grouped them accordingly. That is, all notes relating to employment were put in one column, all those relating to enjoyment of reserve in another column, and so on. The researcher asked the participants to name each category, and this is what the 'Benefit Category' codes refer to.

When the researcher coded the data, she attempted to code to a finer degree, and thus changed some category names. However, the original category as awarded by C1 participants was captured in its own code set in Atlas.ti with the prefix 'B Cat', for example 'B Cat: Enjoying reserve'. These are shown in Figure 4.5. The blue numbers in Figure 4.5 refer to the category placing, which is discussed in Section 4.3.7.2. In Figure 4.6, all the categories named by C1 still exist within the researcher's categories, but with a different structure. For example, C1 grouped together 'Tourism and knowledge of animals', whereas the researcher split these into 'Learning/training' and 'Benefits from tourism/tourists'. These categories take into account the data from C1 **and** C2 and constitute the coding frame for this question.

As explained in Appendix E, this data was explored via network views in Atlas.ti. This resulted in Figures 4.5 and 4.6.

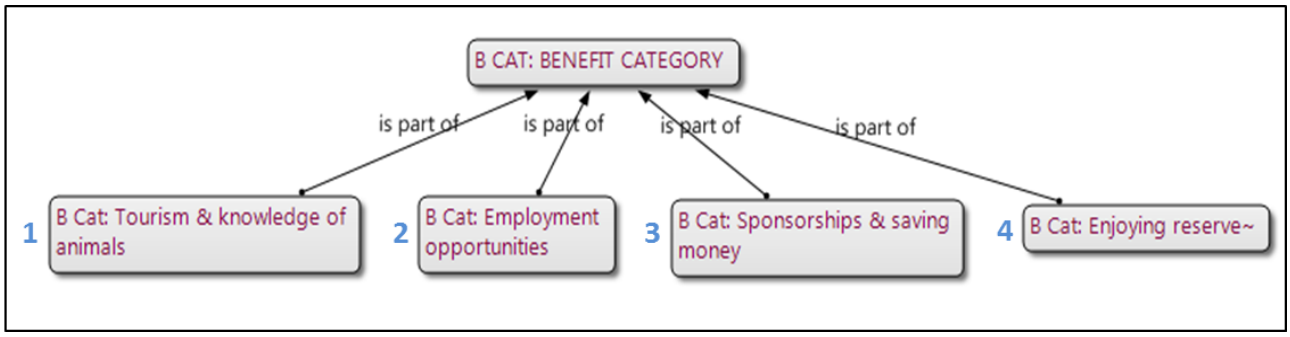



Figure 4.5: DGR/KG benefit categories as determined by C1 participants according to number of notes

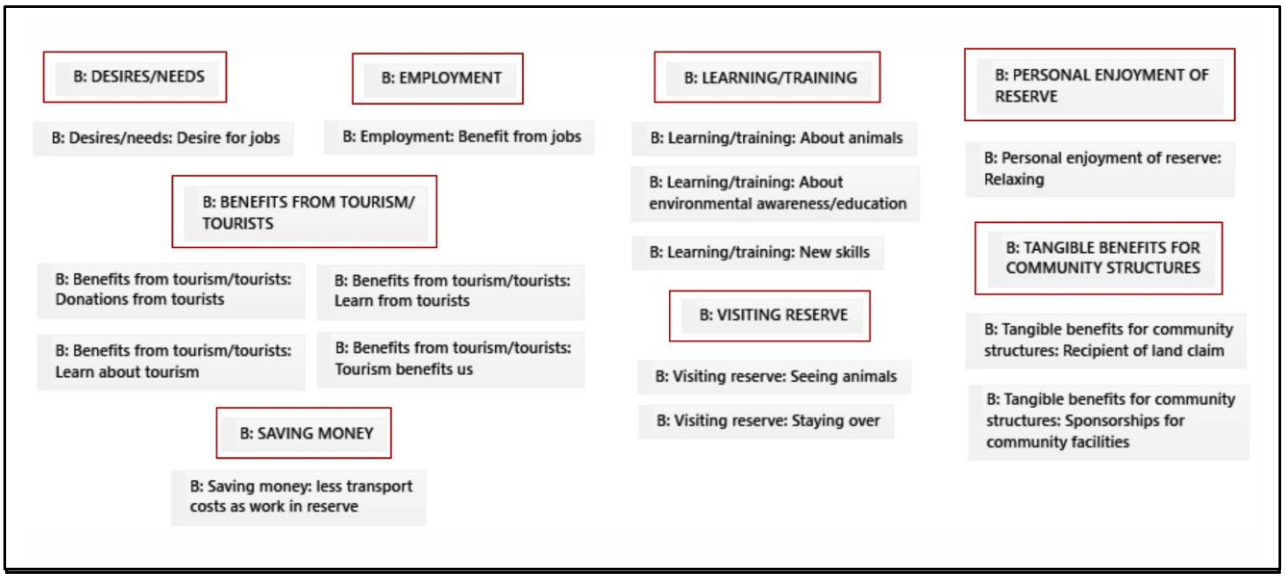



Figure 4.6: DGR/KG benefit categories as determined by researcher during coding

### *4.3.7.2 Benefit category place*

After participants had determined categories, the notes in each category were counted, giving an importance weighting to each category, as indicated by the blue numbers in Figure 4.5. For example, according to the number of notes 'Tourism and knowledge of animals' (with 12 notes) was placed first, above 'Employment opportunities' (which had 10 notes). However, before accepting tourism and knowledge of animals as being the most important benefit to C1, the researcher asked the group if this was indeed the case for each category and its placing. The group was then given the opportunity to vote on their order of preference (i.e. ranking the categories). In this case, the group voted employment to be more important, and thus earn Category Place 1, in spite of it having less notes. The benefit category placing/ranking by C1 as per their vote is shown in Table 4.17. 'Tourism and knowledge of animals' was swapped with 'Employment opportunities' to take first place. The results for losses are discussed in Section 4.3.8.

The four C2 interviewees were not asked about categories, since they were not producing notes as a group that needed to be ordered. C2 were asked in the interview to name the benefits and losses which they thought impact the community, and then to attempt to rank them in importance. To capture

individual C2 opinions on benefit ranking, each individual interview has its own column in Table 4.17. For various reasons, most C2 participants felt they could not rank the benefits. These cells are then left blank.

Interviewee 1 mentioned that benefits are written into the founding documentation (for example, the establishment of the Community Trust), but that establishing the various benefits will take a while. The same participant did acknowledge that community projects bring some benefit. Interviewee 2's response to this question was that *"Maybe through the community-based programmes"* some benefits may ensue. Interviewee 3 did not rank benefits, while Interviewee 4 ranked 'Proximity to work' as Category Place 1.

Table 4.17: DGR/KG benefit category placing: C1 compared to C2

| CATEGORY PLACE (According to C1 vote) | C1 NOMINAL GROUPING TECHNIQUE | C2 INTERVIEW 1 | C2 INTERVIEW 2 | C2 INTERVIEW 3 | C2 INTERVIEW 4 |
|---|---|---|---|---|---|
| **1** | Employment opportunities (10) | | | | 1. Proximity to work |
| **2** | Tourism & knowledge of animals (12) | | | | |
| **3** | Sponsorships and saving money due to proximity to work (2) | | | | |
| **4** | Enjoying reserve (1) | | | | |

* Number in brackets is the number of notes produced by C1 participants.
* Where C2 interviewees felt it was not possible to rank, cells are left blank.

### *4.3.7.3 Specific benefits*

It may be helpful here to refer back to Figure 4.6 which shows the hierarchy of benefits which emerged as coding occurred. Table 4.18 shows the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most important benefits overall, from the perspective of **both C1 and C2** (the top five benefits according to number of quotes have their titles and totals in bold). Fewer quotes from C1 are used here to analyse the data because all C1 quotes came from notes where participants made use of brief sentences or one-word answers (for example, "*Job opportunities*" and *"To know more about animals"*). To assist in demonstrating the wider picture, the totals for each code group heading (for example, 'Access to natural resources' and 'Facilities and infrastructure') have been added to the table within the grey bars (italicised and centred). These are also referred to as the broader code groupings. Where a code was not used in the particular case study, it is not included in the table. However, the code group headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which benefits are relevant and which are not relevant to each particular case study and to aid cross-case analysis.

Table 4.18: Code frequencies for 'Q8-6 Benefits': DGR/KG

| **CODE FREQUENCY** (B=Benefit) | **C1 NOMINAL GROUPING TECHNIQUE** | **C2 INDIVIDUAL INTERVIEWS** | **TOTALS** |
|---|---|---|---|
| B: ACCESS TO NATURAL RESOURCES | *0* | *0* | *0* |
| B: BENEFITS FROM TOURISM/TOURISTS | *5* | *1* | *6* |
| B: Benefits from tourism/tourists: Donations from tourists | 1 | 0 | 1 |
| B: Benefits from tourism/tourists: Learn about tourism | 1 | 0 | 1 |
| B: Benefits from tourism/tourists: Learn from tourists | 1 | 0 | 1 |
| **B: Benefits from tourism/tourists: Tourism benefits us** | 2 | 1 | **3** |
| B: DESIRES/NEEDS | *1* | *0* | *1* |
| B: Desires/needs: Desire for jobs | 1 | 0 | 1 |
| B: EMPLOYMENT | *9* | *4* | *13* |
| **B: Employment: Benefit from jobs** | 9 | 4 | **13** |
| B: FACILITIES AND INFRASTRUCTURE | *0* | *0* | *0* |
| B: GENERAL COMMENTS ON ROLE OF RESERVE | *0* | *0* | *0* |
| B: LEARNING/TRAINING | *5* | *5* | *10* |
| **B: Learning/training: About animals** | 4 | 0 | **4** |
| **B: Learning/training: About environmental awareness/education** | 1 | 4 | **5** |
| B: Learning/training: New skills | 0 | 1 | 1 |
| B: NO BENEFITS RECEIVED | *0* | *0* | *0* |
| B: PERSONAL ENJOYMENT OF RESERVE | *1* | *0* | *1* |
| B: Personal enjoyment of reserve: Relaxing | 1 | 0 | 1 |
| B: SAVING MONEY | *1* | *1* | *2* |
| B: Saving money: Less transport costs as work in reserve | 1 | 1 | 2 |
| B: TANGIBLE BENEFITS FOR COMMUNITY STRUCTURES | *1* | *3* | *4* |
| B: Tangible benefits for community structures: Recipient of land claim | 0 | 1 | 1 |
| **B: Tangible benefits for community structures: Sponsorships for community facilities** | 1 | 2 | **3** |
| B: VISITING RESERVE | *2* | *1* | *3* |
| B: Visiting reserve: Seeing animals | 2 | 0 | 2 |
| B: Visiting reserve: Staying over | 0 | 1 | 1 |
| **TOTALS** | **25** | **15** | **40** |

### *B. Specifics: Benefits due to having protected area near your home*

In response to this question, C1 produced 25 notes on benefits received (i.e. 25 quotes), while C2 produced 15 quotes in the individual interviews. The code groups with the highest number of quotes were 'Employment' (13), followed by 'Learning/Training' (10). C1 were most vocal regarding employment (9), while for C2 it was learning/training.

Thirteen out of the 40 responses to this question referred to the benefit of **employment.** C1 generated nine of these quotes, while C2 produced four. Both constituencies seemed aware of the importance of this benefit. C1 referred to job opportunities as a benefit and that the reserve provides jobs. One C1 participant wrote *"We benefit from work"* (P76). C2 quotes alluded to building up a database of local

expertise, the importance of employing locals, building skills and trying to facilitate local entrepreneurship. Two examples follow:

> *"Yes, because the landowners don't have staff for building a lodge … this is why we want to set up the database so that you really can [trust] that somebody who says 'I am a carpenter', is a carpenter. … I think where we are now, it's at a stage where they profit, and we also profit, … because we have so many people so close …"* (P343, 204:204).

> *"Tourism jobs are that much. Construction jobs are that much [implying they are limited]. Currently … there's over R100–R200 million worth of infrastructure being developed. You don't calculate that investment coming into this … community. And if it wasn't for conservation … there wouldn't have been the construction phase. So the next phase is this skilled labour force here, which you need to be able to do tourism – these guys have to be absorbed into this. And a lot of times, if I see there's a guy that's good with this or that …, eventually he gets moved up into the next section"* (P348, 266:266).

The second quote above touches on the reality that construction and tourism jobs are limited, but that when provided, they develop people.

Emerging with 10 quotes in total, was the code group '**Learning/training'.** Within this, **'Learning/training: About environmental awareness/education**' had the most quotes for this question (Five – C1:4, C2:1), after 'Employment' (13). However, following on closely is the code with the third largest number of quotes, namely **'Learning/training: About Animals'** (C1:4; C2:0).

For **Learning/training: About environmental awareness/education'**, all four C2 quotes came from the same participant who is very active in this regard. The interviewee mentioned science, accounting and mathematics programmes that his lodge is involved in, over and above the conservation programmes. The following quotes provide an example of an initiative for local school children, followed by a more general statement on the growing awareness of conservation.

> *"And to use this tourism model as a means to treat the kids and to take them out of their environment into such an environment. It's like doing a team building at office – it doesn't work that well. But take them into a lodge or take them out here to the bush – it's always more successful, you know. The venue adds to the experience …"* (P348, 151:151).

> *"… I think there's definitely a conservation awareness. If I say conservation awareness I mean awareness about animals, having the game reserve here. For some it might be a threat. For some it might be a positive but, you know what, it's going to take time to change it into a positive"* (P348, 278:278).

The C1 note expressed learning more about nature and conservation as a benefit (P97).

For '**Learning/training: About animals**', C1 were more vocal than about environmental awareness/education, expressing the benefits of learning about the Big Five (P86), *"Knowledge of various animals in the world"* (P87), *"To know more about animals"* (P86), and *"Children learn more about animals"* (P96).

The final quote in this code group was from a C2 participant under the code '**Learning/training: New Skills**': *"And they will get training from the government"* (P343, 201:201) in reference to government training programmes.

In terms of number of quotes, the next code group was **'Benefits from tourism/tourists'** with six quotes in total, five of which came from C1. Considered cumulatively, the quotes show acknowledgement of the benefits brought by tourism, for example *"Our village becomes well known to the visitors of Dinokeng"* (P88); *"We are going to learn from tourists"* (P79); and *"We are going to get donations from tourists"* (P74). In research done in nearby Rust de Winter and Rapotokwane by Coetzee *et al*. (2013), the community also supported the growth of tourism facilities and initiatives.

'**Tangible benefits for community structures**' (four quotes) also deserves mention. Three of these came from C2 and address the successful land claim; assisting in building a frail care facility in the community; and the fact that, from the perspective of one of the landowners, the community do see the social investment programmes emanating from the reserve as benefits. The C1 note read *"Sponsorships for creches, churches, NGOs, old age centres"* (P80), and shows awareness of a variety of community facilities that have benefited. The C2 quote relating to the land claim follows: *"[The land claim is] from the community. That's been successfully awarded. In the development of that there will be community participation, access to the reserve, and a much more structured group that we can deal with – [a group that's] definable, positive, organised"* (P338, 167:169).

C1 do acknowledge the benefit of **'Personal enjoyment of reserve: Relaxing'**: *"To chill"* (P82); as well as **visiting the reserve to see animals**: *"Taking our kids to see the Big Five"* (P83) and *"We are going to have access to go inside and have fun and see animals"* (P85). The C2 quote under 'Visiting reserve: Staying over' is also encouraging: *"… we have seen over this winter when we had specials, the guys coming to stay here weren't from Pretoria or Joburg. It was from the community. Bringing [a] husband, wife, [for] Father's day, Mother's day specials. It was community. … So they are becoming tourists"* (P348, 279:279).

Under **'Saving money'**, the benefits of working closer to home were mentioned by both a C1 and C2 participant.

Conspicuous by its absence were quotes relating to benefits gained from infrastructure, although support for community facilities is noted. The lack of quotes under 'Access to natural resources' is to be expected given the historical context.

*C. Summary: Benefits due to having protected area near your home*

Returning to the original category placings given by C1 participants after voting, 'Employment' was top followed by 'Tourism and knowledge of animals' (Table 4.17). Looking at specific codes, for C1, the top benefits were 'Employment' and 'Learning/training about animals'. For C2, the top were 'Employment' and 'Learning/training about environmental awareness/education'. Examining the broader code groupings (highlighted in grey in Table 4.18), 'Employment' is at the top, followed by 'Learning/training' (equally from C1 and C2), and then 'Benefits from tourism/tourists' (largely from C1).

Both C1 and C2 acknowledged employment due to the reserve as an important benefit. C1 focused on 'Learning/training about animals' as a benefit whereas C2 concentrated on 'Learning/training about environmental awareness/education'. Considered together, there appears to be an increase in environmental awareness.

C1 were aware that benefits accrue from tourism and tourists; while C2 made more mention of tangible benefits for community structures. There is some indication that the community do enjoy DGR and visit it to see animals.

If one considers the top four benefits mentioned by C1, the tangible benefits are jobs (9) and benefits from tourism (2); while the intangibles are learning/training about animals (4) and visiting the reserve to see animals (2). Looking at C2's top codes, the tangibles are jobs (4) and sponsorships for community facilities (2), while the intangible benefit is learning/training about environmental awareness/education (4). Hence overall, the tangible benefits are appearing stronger, but the intangible benefits are also very real.

Section 4.3.7, together with Section 4.3.3, contributes towards addressing Research Objective 4.

## 4.3.8 Losses due to having protected area near your home

Table 4.19: Orientation to Question 9-7: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q9-7 / L=Losses | Y | | What are the losses (costs/negatives) of having this reserve near to your home? Which of those losses impact the most on you? Which ones impact the least? | NGT |
| | | Y | What are the losses (costs/negatives) to the local community due to living near this reserve? Which of those losses/costs do you think impact the most on them? Which ones impact the least? | II |
| **Research Objective** | | | 4 | |

***A. Overview: Losses due to having protected area near your home***

This question captures participants' perception of losses. Strictly speaking, sometimes these may not be actual losses. However, participants' perception of losses must be investigated as it captures what **they think are losses**. This information is important for management to know, so that it can be addressed.

The loss categories determined by the researcher while developing the coding system for this question included those defined by the community, but were coded to a finer level of detail. In terms of category place (or ranking), the top three losses as determined by C1 participants were fear of wild animals, lack of employment and empowerment, and lack of information on reserve. C2 did not rank loss categories. Moving away from ranking to specific quotes, C1 mentioned more losses than C2, with C1 highlighting eight types of losses, and C2 four. In total for losses, C1 produced 18 notes, while seven quotes came from the C2 interviews (three of the latter referred to no losses being incurred). The top loss for C1 was fear of wild animals while no loss was mentioned more than once by C2.

As was done in Section 4.3.7 on 'Benefits', the discussion is divided into loss category, loss category place and the specific losses (Sections 4.3.8.1 to 4.3.8.3 respectively).

### *4.3.8.1 Loss category*

As explained for the preceding question on benefits, the C1 participants grouped the losses (written on notes) into categories and then named those categories. These original categories were captured within Atlas.ti. with their own code set, using the prefix 'L Cat', for example 'L Cat: Fear of wild animals'. C2 were not asked about categories, because they were not producing notes which needed to be grouped. They were only asked to name the losses which they thought impact the community. The data were explored via network views in Atlas.ti. Figure 4.7 indicates the loss categories identified by the community, while Figure 4.8 depicts the loss categories developed by the researcher during coding.

All the categories named by C1 still exist within the researcher's categories, but with a different structure containing five main headings ('L: Fear of wild animals'; 'L: Insufficient employment, empowerment and donations'; 'L: Lack of access to natural resources'; 'L: Lack of information/contact' and 'L: Other'), some of which have sub-headings. A few of the original C1 participant categories have been merged, such as 'Lack of information on reserve' with 'Lack of connection to head of reserve'. Other loss categories were restructured to fall under 'Lack of employment, empowerment and donations'. The blue numbers in Figure 4.7 refer to the category placing, which is discussed next.

### *4.3.8.2 Loss category place*

After participants had determined categories, the notes in each category were counted, giving an importance weighting to each category. This is indicated by the blue numbers in Figure 4.7. For example,

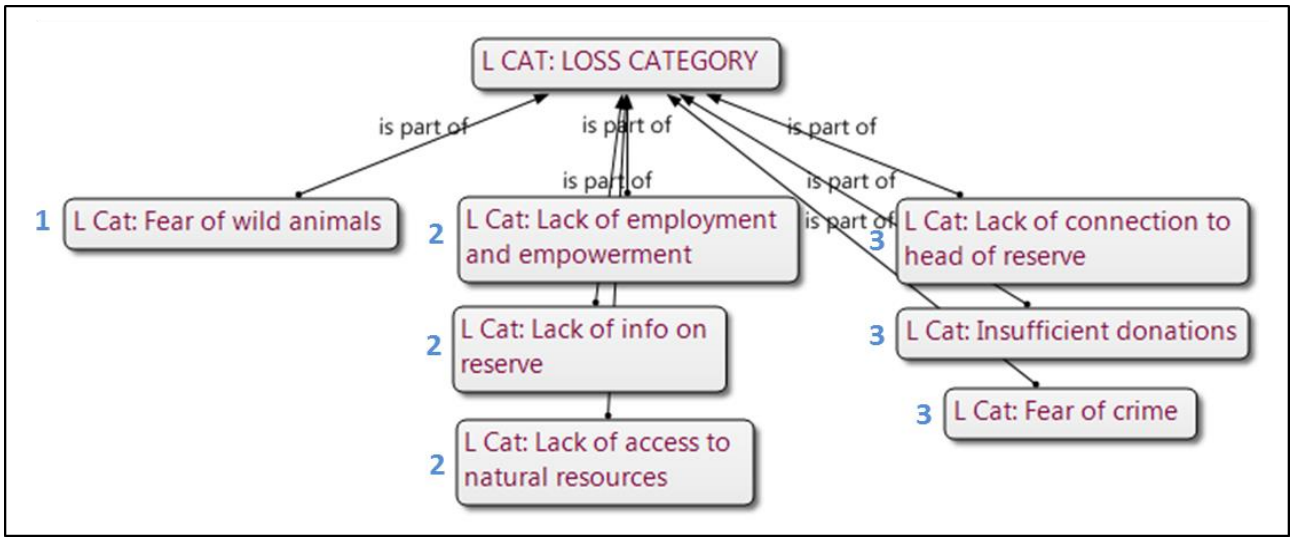



Figure 4.7: DGR/KG loss categories as determined by C1 participants according to number of notes

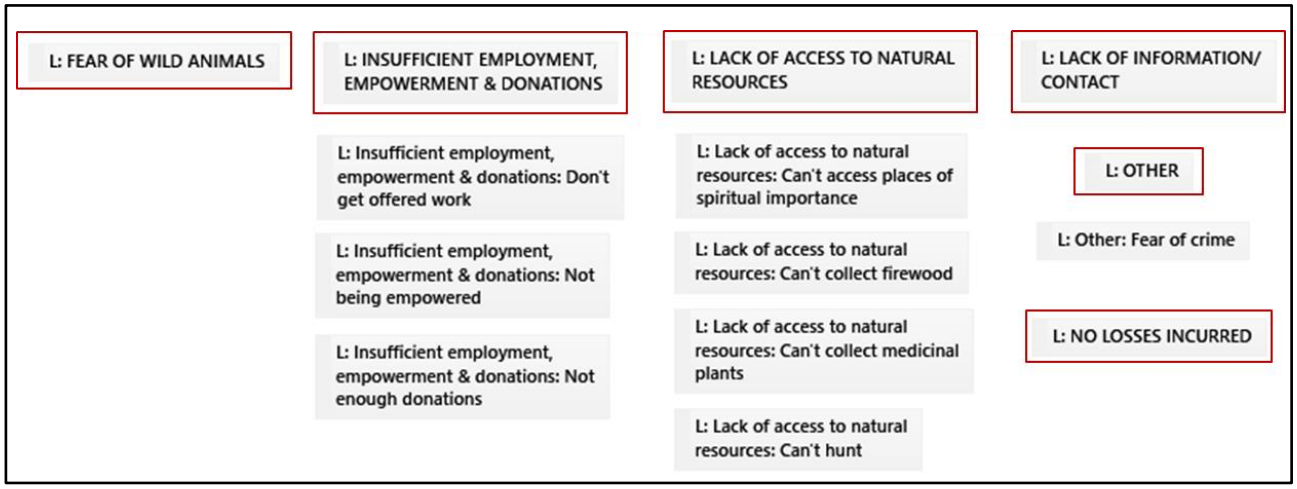



Figure 4.8: DGR/KG loss categories as determined by researcher during coding

'Fear of wild animals' (with six notes) was placed first, above 'Lack of information on reserve' (which had three notes). Once again, the researcher asked the group if they agreed with the order of importance of the loss categories. In this case, they did not. Column 1 in Table 4.20 displays the category placing according to the C1 votes. C2 participants were asked to mention losses but were not asked to rank them.

Table 4.20: DGR/KG loss category placings: C1

| CATEGORY PLACE (According to C1 vote) | C1 NGT | |
|---|---|---|
| **1** | Lack of information on reserve | (3) |
| **2** | Lack of employment and empowerment | (3) |
| **3** | Fear of wild animals | (6) |
| **4** | Lack of access to natural resources | (3) |
| **6** | Lack of connection to head of reserve | (1) |
| **5** | Insufficient donations | (1) |
| Not ranked | Fear of crime | (1) |

* Number in brackets is the number of notes produced by C1 participants.

For C1 participants, the top three losses as per the group vote were 'Lack of information on reserve' (3), 'Lack of employment and empowerment' (3 notes), and 'Fear of wild animals' (6). Even though 'Fear of wild animals' had the most notes, C1 participants placed it third.

#### *4.3.8.3 Specific losses*

The reader may want to refer back to Figure 4.8 which indicates the hierarchy of losses determined by inductive coding. Table 4.21 shows the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most significant losses overall (i.e. when considering **both C1 and C2**). The top four losses according to the number of quotes have titles and totals in bold. To facilitate the wider picture, the totals for each code group heading (for example, 'Lack of access to natural resources') have been added to the table within the grey bars (italicised and centred). Where a code was not used in the particular case study, it was not included in the table. However, the code group headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which losses are relevant and which are not relevant to each particular case study, and to aid cross-case analysis.

All C1 quotes came from notes where participants made use of brief sentences or one-word answers (for example, "*Scared of animals*" and "*We can't have firewood*"). C2 quotes are usually longer, emanating from individual interviews.

Table 4.21: Code frequencies for 'Q9-7 Losses': DGR/KG

| CODE FREQUENCY (L=Losses) | C1 NOMINAL GROUPING TECHNIQUE | C2 INDIVIDUAL INTERVIEWS | TOTALS |
|---|---|---|---|
| **L: FEAR OF WILD ANIMALS** | ***6*** | *1* | ***7*** |
| L: INSUFFICIENT EMPLOYMENT, EMPOWERMENT AND DONATIONS | *4* | *0* | *4* |
| L: Insufficient employment, empowerment and donations: Don't get offered work | 2 | 0 | 2 |
| L: Insufficient employment, empowerment and donations: Not being empowered | 1 | 0 | 1 |
| L: Insufficient employment, empowerment and donations: Not enough donations | 1 | 0 | 1 |
| L: LACK OF ACCESS TO NATURAL RESOURCES | *3* | *3* | *6* |
| L: Lack of access to natural resources: Can't access places of spiritual importance | 1 | 0 | 1 |
| **L: Lack of access to natural resources: Can't collect firewood** | 2 | 1 | **3** |
| L: Lack of access to natural resources: Can't collect medicinal plants | 0 | 1 | 1 |
| L: Lack of access to natural resources: Can't hunt | 0 | 1 | 1 |
| **L: LACK OF INFORMATION/CONTACT** | *4* | *0* | ***4*** |
| **L: NO LOSSES INCURRED** | *0* | *3* | ***3*** |
| L: OTHER | *1* | *0* | *1* |
| L: Other: Fear of crime | 1 | 0 | 1 |
| **TOTALS** | **18** | **7** | **25** |

***B. Specifics: Losses due to having protected area near your home***

C1 referred more to benefits than C2 (C1:25; C2:15). It is positive that C1 recognised benefits received, but they also noted more losses than C2 (C1:18; C2:7). In the interest of improving understanding between local people and reserve/tourism management, it is constructive for C2 to recognise the losses identified by C1, and where possible, to address these.

In terms of number of mentions (notes), the category '**Fear of Wild Animals**' received the most (C1:6; C2:1). This will be discussed first, although the reader should remember that C1 placed this as the third most significant loss, and not as the first. Three of the C1 quotes relate to fear in general: *"Fear of dangerous animals"* (P110); *"Scared of animals"* (P99); and *"Not safe because of Big Five"* (P111). The other three notes referred to the loss of no longer being able to walk through the area, for example: *"You can't walk through"* (P112) and *"Must travel through using transport"* (P113). The C2 quote recognises this loss but also touches on the near impossibility of addressing the problem of wild animals within the reserve: *"In terms of hearing the jackal crying or seeing the elephant [eating] the vegetables, … that might be a threat.' … what are you going to do if we know there's a lion close to the school?' What's close, you know? No, we saw a lion on the road. Now it's close. Come and remove your lion. We can't remove the lion"* (P348, 252:252). The school referred to is the Klipdrift School which is still inside the reserve, but government plans to build a new school outside DGR to replace this one.

The code category '**Lack of access to natural resources**' had the next highest number of quotes (six with C1:3; C2:3). This code group had eight codes, four of which were used when coding the Dinokeng data. Resource access did emerge under negative changes (Section 4.3.3.2) in the context of firewood, healing waters and water usage. The first two surfaced again in this question. Frequencies, however, were low overall. C1 mentioned firewood twice [for example, *"No more going to get some firewood, etc."* (P102)]; and C2 alluded to it once, but was speculating: *"… another thing about the wild is that you could also collect wood … So probably that would be one of the main things"* (P339, 92:92). The other natural resource loss mentioned by C1 was the water used for spiritual purposes: *"We can't have water from the river according to our religion"* (P107). Hunting and medicinal plants were also highlighted, but by a C2 participant who mentioned not being able to hunt (P339, 88:88); as well as not being able to collect medicinal plants: *"… when I look at the whole cultural perception of the way in which we do things … for example, when there are ancestral rituals, … there are plants that, even though you've got one in the yard, for instance, you are supposed to go to a wild area and find that thing there and do the ritual"* (P339, 96:96). C1 though did not mention hunting and medicinal plants in this question.

The code category '**Insufficient employment, empowerment and donations**' had four mentions. Keep in mind that C1 ranked 'Lack of employment and empowerment' as the second most significant loss (Table 4.20). Three codes were used, and all the mentions came from C1 (four in total). Two notes related to not being offered work: *"Unemployment, don't offer work"* (P100) and *"Dinokeng must give our*

*people jobs"* (P101); while one related to not being empowered (P106), and the other to insufficient donations (P109).

C1 ranked the loss category of 'Lack of information on reserve' as the most significant loss (Table 4.20), even though it had three notes (as opposed to six notes for 'Fear of wild animals'). In Table 4.21, the code '**Lack of information/contact**' has four notes because, during coding, the single note under the original category 'Lack of connection to head of reserve' was coded under the researcher's category of 'Lack of information/contact'. Lack of information has emerged under other questions, and the fact that C1 vote it as the most significant loss bears consideration. The notes read: *"We want to know the boss of Dinokeng"* (P103); *"No access to information about Dinokeng"* (P114); *"Not given enough information"* (P115); and *"Living near Dinokeng with no information about the reserve"* (P116). Providing information need not be an expensive exercise and could address what C1 perceive to be a major loss. It is certainly simpler to address than C1's second most significant loss – the original category of 'Lack of employment and empowerment' (Table 4.20), and third most significant loss – 'Fear of wild animals'.

The final loss category (and code) that should be mentioned is '**No losses incurred**'. All three quotes here emanate from C2, for example, *"I cannot think of any"* (P343, 209:209) and *"There was none historically here, because there was no community"* (P348, 198:198). The discrepancy between C1 and C2 could relate to different understandings of losses. In the historical context, this is not a community who had access to game and other resources, and then lost that access. This is a fairly new community and Dinokeng was farming land beforehand. Some individuals may have gathered resources during that time, but it was hardly widespread. C1, however, perceive aspects such as lack of employment and lack of information as losses. In the strictest sense of the word, these are not losses because they were not in existence beforehand. However, this is how C1 answered the question, and therefore cognisance needs to be taken of these points.

### *C. Summary: Losses due to having protected area near your home*

In determining the importance of categories, C1 participants deviated from the number of notes produced and placed 'Lack of information on reserve' as the most significant loss, followed by 'Lack of employment and empowerment' and then 'Fear of wild animals'. In terms of which codes were used most, the C1 results were 'Fear of wild animals', 'Lack of information/contact' and then 'Can't collect firewood' together with 'Don't get offered work'.

C1 reported more losses than C2 (C1:18; C2:7). It is important to note that out of the seven C2 quotes, three of these refer to there being no losses incurred by C1 and three are speculation as to what the community may miss in terms of natural resource access. This leaves only one C2 quote for this question – the one relating to fear of wild animals. It makes sense that C2 would not mention many losses,

because the community is fairly new to the area. However, C1 view aspects such as lack of information/contact and lack of employment as losses, and it is hence important for C2 to acknowledge this perception, and address where possible.

'Lack of information on reserve' was voted by C1 as the most significant loss. This has emerged before and bears consideration. C1 want information and want to feel connected to the reserve. This was not mentioned by C2. Providing information need not be expensive and could speak to what C1 perceive as a major loss. This is simpler than addressing employment and empowerment. Information provision can also extend towards alleviating the fear of wild animals.

C1 chose the second most significant loss as 'Lack of employment and empowerment'. The issue of employment has emerged before. All mentions here came from C1.

Fear of wild animals was placed third by C1 (C1:6; C2:1) and quotes referred to fear in general and the problem of not being able to walk through the area any longer. There is nothing one can do about the latter, but the former can be addressed through education; ensuring the barrier wall and fence are secure; and providing information on who to call and what to do if an animal escapes.

Natural resource access is not a major issue at Dinokeng but did emerge here with mentions of firewood and lack of access to the river for spiritual purposes. The reserve manager did mention that they try to facilitate access to the river when required. Perhaps that information can be more widespread to alleviate the sense of exclusion from places of spiritual importance. One C2 participant also speculated that firewood, bush meat and medicinal plants could be resources that the community might miss. Medicinal plants were also mentioned by C2 in Section 4.3.3.2 as a negative change.

Sections 4.3.3, 4.3.7 and 4.3.8 contribute towards answering Research Objective 4.

### 4.3.9 Dreams for an ideal future

Table 4.22: Orientation to Question 14-10: DGR/KG

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q10-8 / D=Dream | Y | | For you, living near this reserve, what is your ideal future for your community? What is your dream situation? | FGI |
| | | Y | For this local community, living near this reserve, do you have any ideas on what could be an ideal future for them? | II |
| **Research Objective** | | | 6 | |

### *A. Overview: Dreams for an ideal future*

Table 4.23 outlines the results for this question. Participants were very active here, with 25 dreams being expressed in total, the large majority of which came from C1 (18). 'Interaction with reserve' was the dream most verbalised (seven quotes), with six coming from C1. The need for this intangible benefit has emerged several times in the data analysis for this case study and must be noted. 'Community projects and financial aid' received six quotes (C1:4; C2:2); 'Facilitate entrepreneurship' had four quotes (C1:3; C2:1), and 'Environmental education' elicited three dreams (C1:2; C2:1). 'General education to uplift community' and 'More development and employment' received two quotes each. The quotes for the former were evenly split amongst C1 and C2, while for the latter they both came from C1. Finally, 'Conservation/tourism ethos spread into local community' received one C2 quote.

For C1, 'Interaction with reserve' and 'Community projects and financial aid' emerged as the most mentioned. For C2, it is 'Community projects and financial aid', albeit at a low frequency of two quotes.

Table 4.23: Code frequencies for 'Q14-10 Dream': DGR/KG

| CODE (D=Dream) | C1 | C2 | TOTALS |
|---|---|---|---|
| D: Interaction with reserve | 6 | 1 | 7 |
| D: Community projects and financial aid | 4 | 2 | 6 |
| D: Facilitate entrepreneurship | 3 | 1 | 4 |
| D: Environmental education | 2 | 1 | 3 |
| D: General education to uplift community | 1 | 1 | 2 |
| D: More development and employment | 2 | 0 | 2 |
| D: Conservation/tourism ethos spread into local community | 0 | 1 | 1 |
| **TOTALS** | **18** | **7** | **25** |

### *B. Specifics: Dreams for an ideal future*

For this final question, the data are displayed differently. In order to reflect all the dreams expressed by participants, their quotes are organised in table format under the relevant code (Table 4.24). The reference within Atlas.ti and the constituency (C1 or C2) from which the quote originated, are also indicated in the table. A brief analysis takes place in the summary of Section 4.3.9.

### *C. Summary: Dreams for an ideal future*

The desire of C1 to have more **interaction with the reserve** stood out above other codes. Participants want to meet together, work as one and have more access to information regarding the reserve. This theme has recurred throughout. What is promising is that C2 also desire this, as evidenced by the C2 dreams. It is an intangible benefit to both, that need not cost much but can enhance the relationship between the reserve and community.

Table 4.24: Dreams of C1 and C2 for an ideal future: DGR/KG

| 1 INTERACTION WITH RESERVE | REF. | |
|---|---|---|
| *"My dream is simple … to one day see Dinokeng Portion 12 and Kekana being one, our community understanding better what's within the game reserve. It's a dream to see the partnership continuously growing and it's a dream to see us as one – sharing a common sense; common goals; having programmes to get there in our community meeting, in their community meeting; becoming one committee meeting having a year plan together. Then we will achieve our goals …".* | P334, 116: 116 | C1 |
| *"[If we can] only start, it's going to be simple. It can't help to work with the people when they are at a distance. … we have to look for the bottom line – the information, for example, if something happened urgently, I don't know who to contact there … I should know the person whom I need to talk to. … we cannot just play a hide and seek game. They must come to us. We will go to them. Information is … the key to everything".* | P334, 128: 129 | C1 |
| *"… in future we don't have to be a divided community. We must share a common goal. We must be us, not landowners, not communities, but us. ... We must be one. ... We must be united".* | P334, 140: 141 | C1 |
| *"But as long as somebody's there [referring to being far off], we will continue talking, talking, talking, but we will never be one. Once those people … up there … can come down here, I really can see a good success".* | P334, 148: 149 | C1 |
| *"I think that – … the Dinokeng landowners, that thing that will make them scared to come to our community – if they can come together to be with us, maybe that thing will be out of their mind. You'll find that maybe there was something that makes them not to be closer to us, so that we can just clean that thing."* | P334, 155: 155 | C1 |
| *"[Refers to making judgements about a person before meeting them] So to clean up there needs to be a better [understanding], to be closer to the person to see that maybe I was thinking [something negative about a person], but then I see, 'no, it's not like that. I was just imagining – maybe hearing people say that'. I think coming together will be good for us. We'll be having a good communication. Even when they pass through our community they won't be scared".* | P334, 162: 162 | C1 |
| *"In the future, I would like to see my community interacting with this reserve."*<br>* This C2 participant works at Dinokeng but lives in a community nearby. | P339, 136: 136 | C2 |
| **2 COMMUNITY PROJECTS AND FINANCIAL AID** | | |
| *"… I think if the game reserve can offer the community bursaries ... there are other children that cannot even provide for themselves. They are orphans, they have nothing".* | P334, 36:36 | C1 |
| *"… maybe in future if the game reserve can help us with donations. That money we can use towards service delivery in our community and making sure our roads are tarred nicely. Those poor houses, maybe we build them RDP houses and stuff".* | P334, 63:63 | C1 |
| *"I will be happy if the game reserve can offer our children to drive inside this game lodge without paying something".* | P334, 63:63 | C1 |
| *"I was just thinking of ourselves living around the game reserve – we should be charged a lesser amount compared to people coming from far, in terms of fees to get inside for some walking or driving".* | P334, 76:77 | C1 |
| *"I think if the game reserve can continue to facilitate government attention into this area. There are a lot of government initiatives that are really, really good, but they're not reaching all the people, and if we could bring them here, because of our interconnection. For example, next year there is a government initiative to train people in hospitality and community, and they've extended an invitation to anybody to be collected here on a Monday morning and dropped off again on the Friday afternoon, and they will bring people that have previously been trained to come and get experiential learning … It's all for free – accommodation, food and education, but our uptake has been deplorable. But if we could get people to grasp these … opportunities … and not see them as a threat … If that could happen, we would roll, because you would be teaching and educating people, and an educated community is a community with choices".* | P338, 214: 214 | C2 |
| *"The whole reserve wants to grow bigger and with this … there will be more jobs. We have the Honorary Rangers, and they give courses and do a lot of stuff and we just have to get our people more involved. Last year we had training for firefighting, and a lot of landowners came and they set a fire and taught the people how to put it out. And the Honorary Rangers do first aid courses and stuff like this, and I think our staff just needs to be trained more. As long as it was a farm, nobody thought about anything – you had your cattle and when the snake came, you just killed it. And now they have to learn how to capture a snake, for instance, and then where to release it. They offer stuff like this, but it's not known … And probably it's on the weekend … and during working hours. It's very hard to train your staff [since we have so few]. You only can start training when you have more than one or two [so] that other ones can do the job, while these two go for training and then you swap. Yes, for us at the moment, it's tricky. A lot of the community don't even know that we exist. So, the community should be … getting to know what we do. But again there's a lot of politics involved. … it would be nice if we could just do a thing for the community and take a few people in game viewers each weekend – but [how will we choose?]. The community leaders have to [decide]. Who's going to be first and who's going to be second and this is very hard to do before the elections. … But after the elections,* … continues | P343, 262: 267 | C2 |

| | | |
|---|---|---|
| **2 COMMUNITY PROJECTS AND FINANCIAL AID** (continued)<br>*we're looking into a soup kitchen. That some restaurant owners or the big shops in Hammanskraal [can donate] veggies and stuff like this … there are some children who don't have parents and they only get food during school time. If there's a holiday, who [will feed them?] … So we want to set up a soup kitchen for the kids that they can at least have two meals a day. And what I think is very important, but this again has to do with the community, they have to learn English with the kids. They have to sit and learn with them …".*<br>* The soup kitchen was initiated in 2016. | | |
| **3 FACILITATE ENTREPRENEURSHIP** | | |
| *"I would see one of us here in a lodge inside there".* | P334, 18:18 | C1 |
| *"Those who have crafts, like my brother here [refers to fellow participant], has got beautiful crafts. If he can [get] access to get some work and send his products there. I think with the ladies as well … if they can have access to sell their things for the visitors there".* | P334, 26:27 | C1 |
| *"I would be happy if I myself can have a space for art gallery, art gallery, yes."* | P334, 63:63 | C1 |
| *"Maybe the [entrepreneurs] in Kekana Gardens ... like the ones you see on the side with the car washing or the tyres and there's another guy who is doing welding. … so that they also get some work from the community. … But therefore you must know what you want and if you really want it, and then you can go for it and then you'll probably also get help. [You cannot] say, 'today I think I want to do this' and then it's not working and the money is not coming in. And if the money is coming in, the people don't … take this money and put it on the side to buy the next stock. They just take it and live with it. And it doesn't work like this, and again it's about education. Educate the people how to run a business, even a small one …".* | P343, 278: 278 | C2 |
| **4 ENVIRONMENTAL EDUCATION** | | |
| *"Maybe if they can give our kids … the tutor from here, from the game reserve. Maybe every Saturday we can come and teach them how … the game reserve works".* | P334, 71:71 | C1 |
| *"It takes me back to a bottom line where we should share our ideas together – the community as well as the game reserve; information that really should teach us on how to protect ourselves from animals and how to act when we see a protected animal – who to call and stuff. Bottom line – education. Teach each other".* | P334, 123: 123 | C1 |
| *"I would like to see our young children having a different mindset towards what the ecosystem is, than what we had. I would love to see our children having more pets. I think it's a good thing – having a relationship with an animal. And also, more education about what the ecosystem is – knowledge."* | P339, 136: 136 | C2 |
| **5 GENERAL EDUCATION TO UPLIFT COMMUNITY** | | |
| *"My dream … I can see myself building a sort of an academy whereby people can … learn, … whereby information will be given to people, so that our children can grow up securing that legacy. Because without information they will be nowhere".* | P334, 53:54 | C1 |
| *"Your success will be measured in terms of your community's health, and the health is measured on economic income. The health is measured on a good education [and] on service delivery that's been installed. So what's going to build the destination is going to be your sightings … the brand would be Big Five. … currently [that is] under construction – 13 elephants and 15 or 16 lions is not a Big Five reserve. But it's going to take time, you see. … Our vision is to put up an educational centre which would focus on science, maths, accounting, innovation, technology, green solutions, where every day you've got 300 kids visiting the centre in the game reserve, experiencing that. And then [in the] afternoon there will be game viewers stopping there and tourists can experience it".* | P348, 299: 299 | C2 |
| **6 MORE DEVELOPMENT AND EMPLOYMENT** | | |
| *"I … would … be happy if the people from outside from America or overseas will like to come and visit here so that they must leave their dollars here".* | P334, 87:87 | C1 |
| *"She dreams that the game reserve could assist in building a shopping mall".*<br>* Translated by facilitator. | P334, 100: 100 | C1 |
| **7 CONSERVATION/TOURISM ETHOS SPREAD INTO LOCAL COMMUNITY** | | |
| *"I think that potential that we've got due to our location ... this game reserve is the ideal entry level into conservation, entry level into tourism where a big component of Gauteng never had the opportunity to go [to conservation areas] due to their inaccessibility. So, I think we can actually serve as a classroom for conservation and tourism in the bigger Africa, where this model can be duplicated to other urban areas to say, '… look here, here was a [run down] farm with goats and sheep … and look how it's changed'. That is the big win. It's a win for conservation. It's a win for the community and it's a win for the economy and for South Africa. I think it's a stunning example".* | P348, 301: 301 | C2 |

* REF=Reference within Atlas.ti.

**Community projects and financial aid** appeared again in the dreams of C1 and C2. C1 requested bursaries for orphans and donations to assist in service delivery. Moreover, they want their children to be taken into the reserve and request dual-pricing (where locals pay less). C2 are also thinking along similar lines (and doing this in conjunction with the block system), and plans are in place to take community members into the reserve, among others; and the soup kitchen is now a reality. Throughout this chapter, other initiatives have also been mentioned. Taken cumulatively, for a small reserve still establishing itself, there are several positive drives that invest in the lives of local people. If these could be 'marketed' more, it could assist in increasing positive attitudes towards the reserve. In terms of training, there are several good initiatives in existence, run by either the reserve or government, for example the firefighting training, programmes offered by the Honorary Rangers, and government training projects. However, it appears that word of these initiatives needs to be further disseminated to increase take up of the opportunities, so that more can benefit and witness the upliftment prospects on offer due to the existence of DGR.

Some **facilitation of entrepreneurship** is already occurring, and recurs in the dreams, where a C2 participant wishes to educate local people on how to run small businesses – not just those related to the reserve, but businesses supported by other community members. A C1 participant dreams of a community member being a landowner, while two others dream of more opportunities to showcase and sell crafts.

**Environmental education** for children is a dream – taking them into the reserve and increasing their understanding of the environment. Under **general education to uplift community**, the desire for information is reiterated. The vision to create an educational centre within the reserve (for both community children and tourists) is shared and could do wonders to make the above-mentioned dreams come true. The potential of Dinokeng to do this and more is reinforced by the dream under **conservation/tourism ethos spread into local community**. A reserve close to the city provides accessibility for many who would never have entered a reserve otherwise and serves as *"… a classroom for conservation and tourism …"* (P348, 301:301).

The desire for information regarding what to do should an animal escape is mentioned again. It emerged throughout the data and needs to be addressed by the reserve.

**More development and employment** is covered by the dream of having greater numbers of tourists coming with their foreign currency and the dream of a shopping mall nearby.

Overall, it appears to the researcher that there is a match here – between what the community want and what the reserve/government are offering. While the reserve has more extensive plans for the future, in the meantime, spreading the word of what **is** happening could assist relationships, since what **is** happening **is** part of what the community desire. This is the only case study where C1 expressed far more dreams for the future in comparison to C2, which could be indicative of their yearning for greater

linkage with DGR. In terms of the future, as DGR grows, the potential is significant. It is encouraging that C1 and C2 are remarkably similar in terms of what they want. In other words, there are already matches in place, and future plans will increase these matches between what C1 and C2 want. The most fitting way to end this section is to repeat the words in one participant's dream: "… *It's a win for conservation. It's a win for the community and it's a win for the economy and for South Africa. I think it's a stunning example"* (P348, 301:301).

Section 4.3.9, together with Section 4.3.4, contributes towards answering Research Objective 6. Sections 4.3.1 to 4.3.9 contained the results and analysis for each question put to participants. The next section (Section 4.3.10) briefly deals with cross-question analyses.

## 4.3.10 Cross-question analyses

### *4.3.10.1 Comparisons across questions: Benefits, Losses, Positive changes and Negative changes*

The purpose of this comparison is to investigate whether any pattern occurs between benefits and losses and positive and negative changes brought about due to the presence of the reserve. This analysis becomes more meaningful in Chapter 7, when patterns are considered across the three case studies. The interpretation and summary section below indicates the Dinokeng/Kekana Gardens results for this cross-question analysis. Figure 4.9 depicts the results for C1 only, while Figure 4.10 shows the frequencies once the C2 data have been added.

***(a) Results: C1***

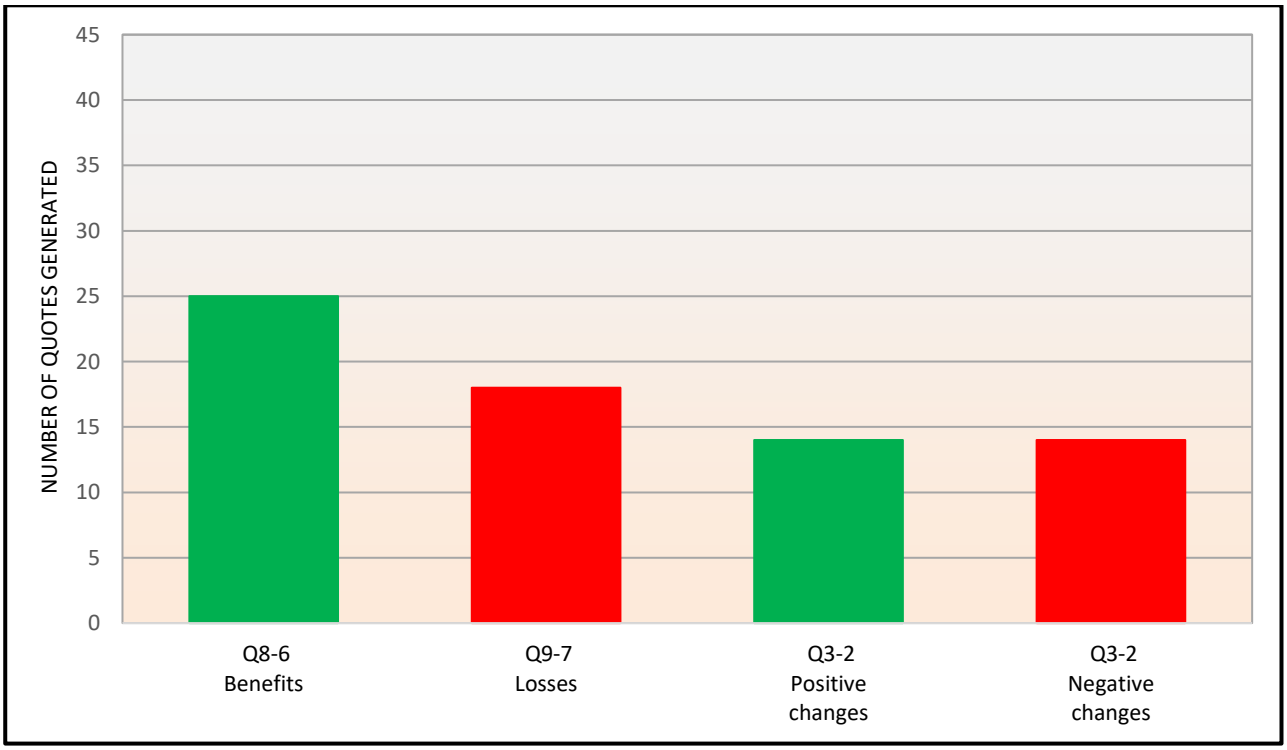



Figure 4.9: Cross-question comparison: C1 only (DGR/KG)

***Interpretation and summary***

C1 identified more benefits than losses, but the same number of positive and negative changes. Overall, these results are moderately encouraging. It could suggest that in terms of benefits recognised, the community around Dinokeng is more positive than negative. More benefits than positive changes were identified, which could be due to the differing methods used for these two questions (positive changes were determined via FGIs, while benefits were established through NGT). The top benefits were both tangible (employment) and intangible (learning/training about animals) (Table 4.18). Fewer positive changes were mentioned, but they were a mix of tangibles (for example, facilities and infrastructure and employment) and intangibles (for example, enjoyment of reserve, inter-cultural contact, exposure and increased pride).

***(b) Results: C1 and C2***

In Figure 4.10, the C2 data are included to see whether this affects the results. The reader may recall that three C2 quotes related to there being no losses (Section 4.3.8.3) and hence these cannot be merely added to the graph since they will appear as actual losses. The dotted rectangle in the losses bar therefore indicates the section of the bar which cannot be considered in the analysis below.

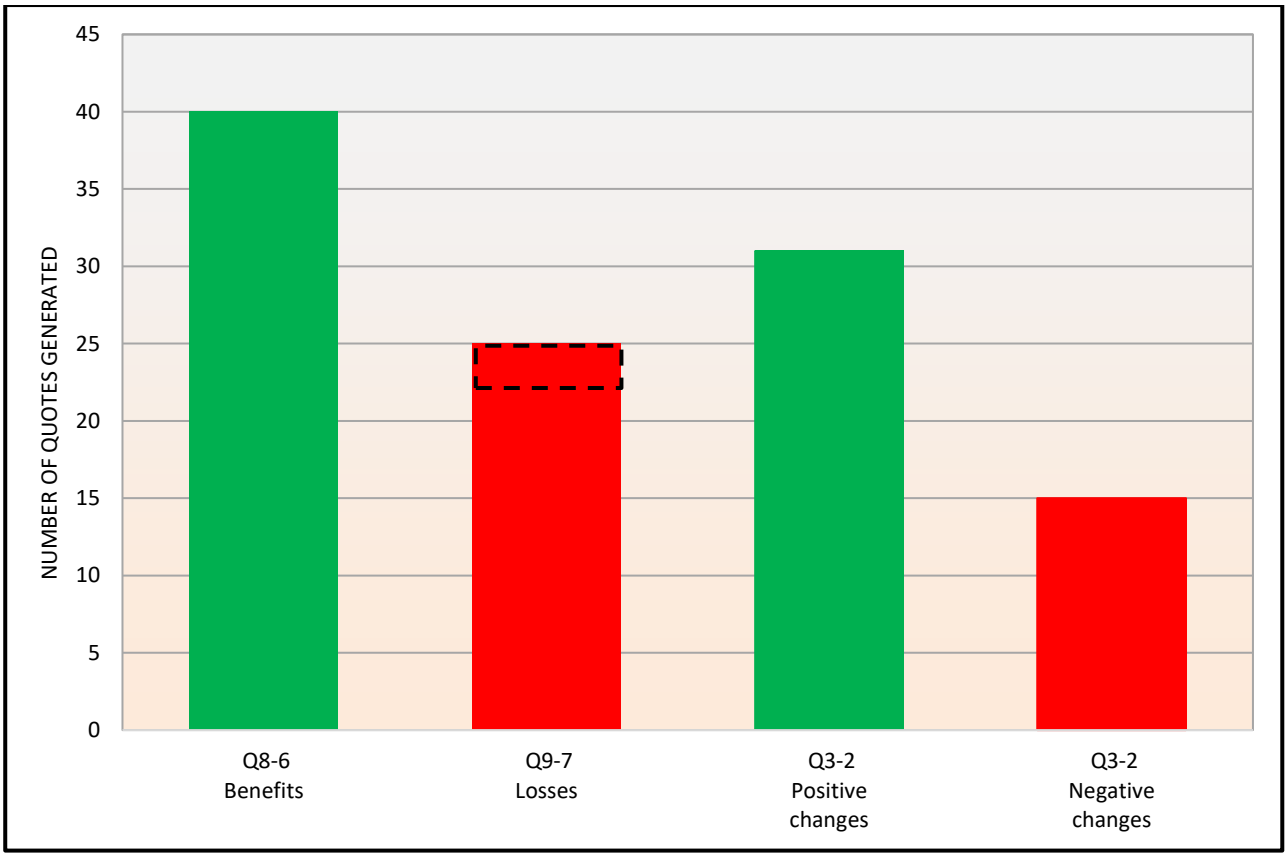



Figure 4.10: Cross-question comparison: C1 and C2 (DGR/KG)

***Interpretation and summary***

The frequency of benefits and positive changes increased considerably once C2's answers were added. Losses increased slightly, and negative changes only increased by one. It would be expected that the frequency in all the questions would increase as more data are added. However, the fact that benefits and positive changes increased far more than losses and negative changes indicates that C2 is largely positive regarding what local people receive from the reserve. Comparing C1 and C2, there was no marked difference in the extent of the perception of positive changes due to the reserve's presence, but there was a difference in terms of what was noted as positive changes (refer back to Section 4.3.3.1). They appeared to concur that 'Facilities and infrastructure' have changed for the better. C2 also focused on 'Education/training' and 'Employment', while C1 focused on more intangibles such as enjoyment of reserve; inter-cultural contact; and exposure and pride.

### *4.3.10.2 Comparing frequencies of answers: Relationship, Negative changes, Positive changes, More positive, Responsibilities, Benefits and Losses*

The purpose of the scatter graph (Figure 4.11) is to compare the frequency of responses of C1 and C2 to these questions, i.e. to compare the number of quotes generated in each question by C1 and C2 respectively. Only those with wide and/or interesting discrepancies (indicated with red frames) are discussed in the interpretation and summary below.

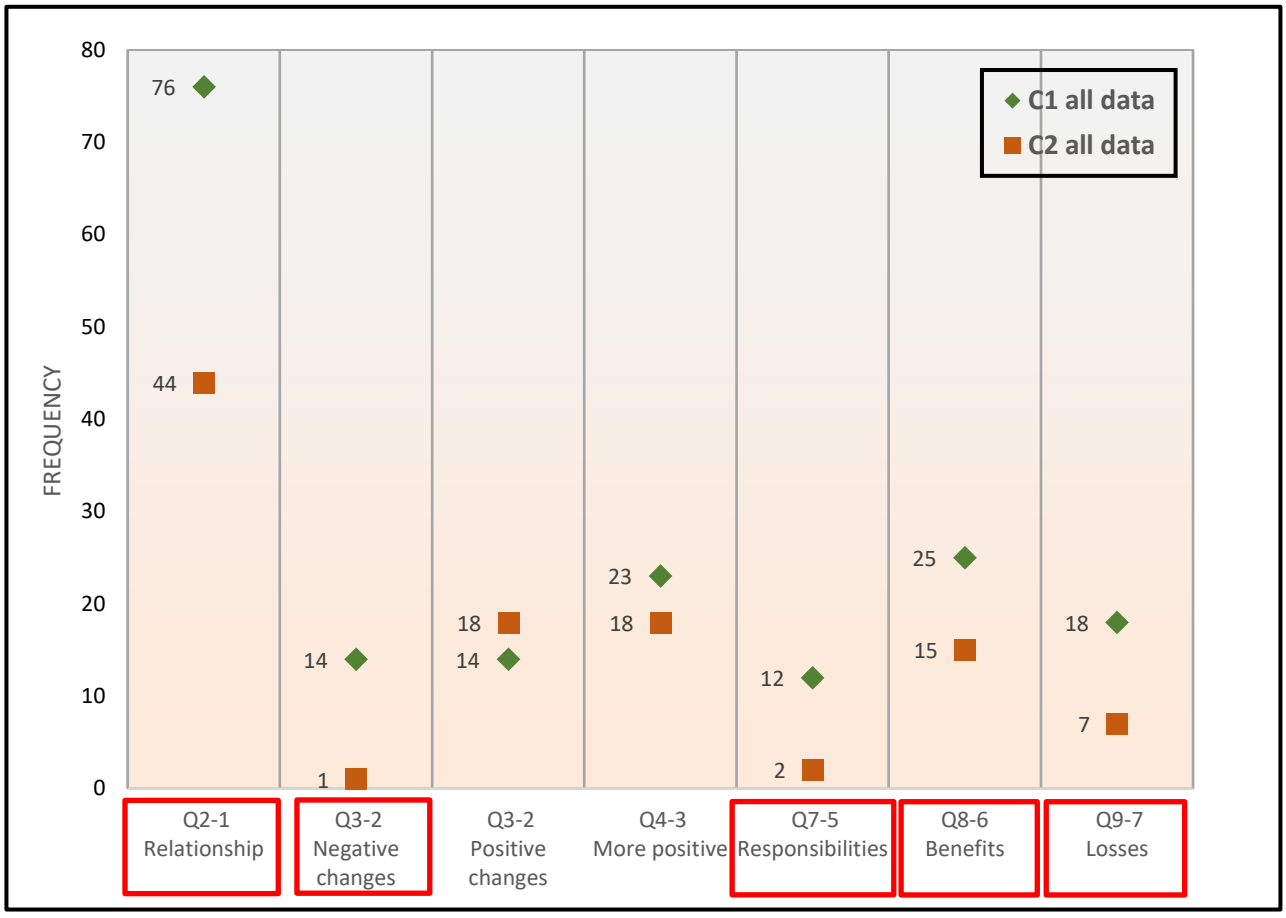



Figure 4.11: Quote frequency comparison across question: DGR/KG

***Interpretation and summary***

For the Dinokeng data, the only question with a wide discrepancy is Q2-1 on the relationship between the community and the reserve. C1 were considerably more vocal regarding the **relationship** between the local community and the reserve. Only 13 of the 76 quotes were specifically positive (appreciate the reserve/resources, appreciate actions taken by reserve and acknowledge actions taken by reserve). The other quotes related to challenges (specifically snakes and distrust of the safety of the boundary wall) and what they desire (specifically collaboration and information). C2 were also very vocal in this question, outlining current or planned initiatives that can improve the relationship. In addition, C2 expressed their desire for more collaboration, and outlined the practical challenges (such as a large ill-defined community, a young reserve and political dynamics).

Although with less of a difference in frequency, but nonetheless interesting, C1 are more verbal on **negative changes** (C1:14; C2:1) as well as **losses** (C1:18; C2:7) than C2. Considering that three C2 quotes under losses refer to there being no losses, in effect the data are more akin to C1:18 and C2:4. Some of what C1 perceive as losses are not losses in the traditional sense, for example, lack of information and fear of wild animals; and the negative changes refer mainly to lack of access to natural resources and a sense of exclusion from the reserve. However, C2 need to acknowledge that C1 perceive more negative changes and more losses than C2 does. This can be addressed through making it easier for C1 to enter and enjoy the reserve (which C2 is working on) and through more information/education. In terms of benefits, it is positive that C1 are more expressive than C2.

**Responsibilities** towards the reserve yielded interesting results. C2 felt C1 had no responsibilities while C1 felt they did (C1:18; C2:2) (both C2 quotes referred to 'No responsibilities'). This self-imposed sense of responsibility towards the reserve is positive as it can increase a sense of custodianship and involvement. It needs to be acknowledged and supported by C2, coupled with education/training on how to respond when animals escape.

Finally, regarding **benefits**, C1 produced ten more quotes than C2. This is a positive result, indicating that C1 do perceive benefits accruing to them due to DGR's existence. Both C1 and C2 focused on employment and learning/training, but C1 also significantly emphasised benefits from tourism.

### *4.3.10.3 Most common words used*

To end the cross-question analyses, a word cloud is used as a data visualisation tool to present the most common words emerging from all the Dinokeng/Kekana Gardens documents combined (i.e. all transcripts from the FGIs and IIs, and all notes generated during NGT). Figure 4.12 presents all words used 20 times or more, with the word size indicating the number of times it was used.

The words 'reserve' and 'people' emerge very strongly, as if to confirm the equal importance of both. This trend continues with 'community' being mentioned many times, but the cumulative strength of the words 'game, 'nature', 'animals' and then 'environment' (along with 'reserve') does suggest that overall, conservation-related words are mentioned more.


Figure 4.12: Most common words emerging from DGR/KG participants

## 4.4 Chapter 4 summary

Chapter 4 presented the data for Case Study 1: Dinokeng Game Reserve/Kekana Gardens. It began by explaining the management and ownership structures for Dinokeng, followed by a background regarding the reserve and the community of focus, namely Kekana Gardens. The responses from both constituencies were analysed for each question put to participants, with an overview being provided, followed by the specifics of the data and then a summary. This chapter covers several research objectives, and contributes towards addressing them by analysing the DGR/KG data. In Chapter 7, the research objectives are addressed again in the form of cross-case analysis, where the findings from all three case studies are considered. In the final chapter (Chapter 9), each research objective is briefly revisited.

Section 4.3.1 (Knowledge and experience) consisted of three groups of questions and addressed Research Objective 2. Sections 4.3.2 and 4.3.5 (Relationship and Others' views) answered Research Objective 3. The data on Responsibilities towards the reserve addressed Research Objective 5 (Section 4.3.6); while Research Objective 6 was covered by Sections 4.3.4 and 4.3.9 (Increasing positive attitudes and Dreams for an ideal future). Finally, Research Objective 4 was covered by four questions dealt with in Section 4.3.3 (Positive and Negative changes) and Sections 4.3.7 and 4.3.8 (Benefits and Losses). Section 4.4.1 below draws the responses from all four questions (Positive and Negative Changes, Benefits and Losses) together in the form of a summary.

A few cross-question analyses were also considered towards the end of the chapter. Chapter 4 is drawn to a close by the creation of a summary for Case Study 1 from the perspective of C1 and C2 (Section 4.4.2), followed by a holistic summary to address the research aim for this particular case study (Section 4.4.3).

The three case study chapters fulfil the first layer of data analysis and interpretation. The second layer occurs in Chapter 7 (Cross-case analysis and interpretation) and the third and fourth in Chapter 8 (Theory, recommendations and framework). Chapter 9 concludes the study.

### 4.4.1 Summary of benefits, losses and other factors influencing attitudes and behaviour

Research Objective 4 sought to identify the benefits received and losses incurred by the local community, as well as other factors which could influence attitudes and behaviour towards the protected area. In this section, the researcher **drew from each question asked of participants in order to answer Research Objective 4 for the Dinokeng/Kekana Gardens case study**. In Chapter 7 (Cross-case analysis and interpretation), findings are drawn from all three case studies to address this objective definitively.

**(a) Benefits and losses**

*Benefits*

- Personal experience of the reserve (particularly seeing animals and going to lodges for functions) appears to create positive attitudes.
- Employment opportunities have improved the quality of life of some, and do improve positive attitudes towards the reserve.
- The community beneficiation projects that locals are aware of, do appear to increase positivity.
- The intangible benefits of increased inter-cultural contact with, and exposure to, tourists emerge and seem to influence positivity.
- The intangible benefit of increased pride in having a reserve on their doorstep seemingly aids a positive attitude.

- Benefits emanating from the presence of tourism and tourists are acknowledged as an aspect that locals appreciate.

*Losses*

- Fear of wild animals, particularly snakes, feeds negativity towards the reserve. In addition, the fact that several do not know how to handle these situations increases anxiety and negativity. A direct negative behaviour towards the environment is evident here, in the number of snakes being killed.
- Distrust of boundary wall and fence increases negativity.
- The employment of non-locals certainly increases negativity and frustration.
- Lack of access to certain natural resources and inability to enter reserve on foot (as well as the feeling that the reserve is for others but not them) causes a feeling of exclusion.
- Lack of information on the reserve also feeds this sense of exclusion.
- Lack of empowerment opportunities seem to aid negative perceptions.

**(b) Other factors**

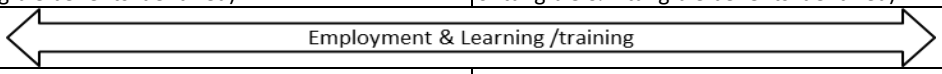
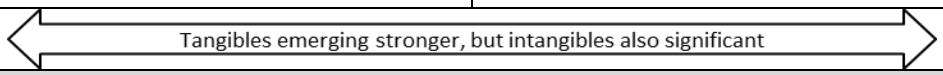
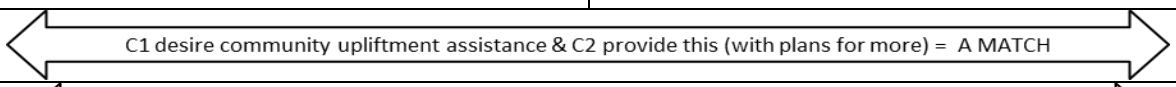
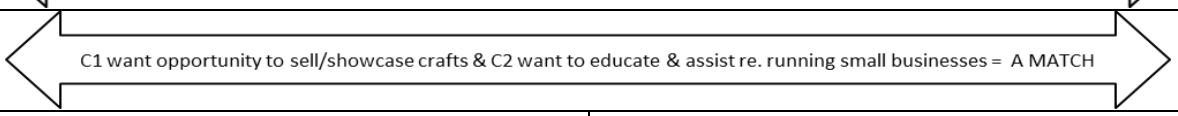
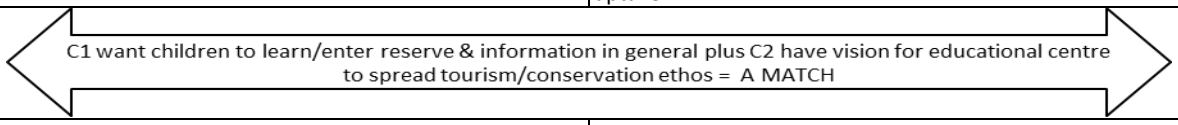
- The clear request for information on the reserve (how it operates, conservation and types of animals) suggests that the provision of this can improve attitudes towards the reserve.
- Local people clearly requested more collaboration and involvement. This suggests that if locals felt more part of the reserve, this could aid positivity.
- The desire to learn from the nature reserve (for both children and adults) emerges strongly. Educational opportunities may therefore improve positivity.
- Existing learning and training opportunities regarding the environment are acknowledged as an aspect that locals appreciate.
- A few have an intrinsic appreciation of nature and conservation, and an environmental awareness, and these appear to aid positivity.
- Results suggest that a better relationship would result in decreased poaching, hence would influence an actual behaviour.
- A self-imposed sense of responsibility towards the nature reserve appears to increase a sense of involvement, and results in direct positive behaviour.

### 4.4.2 C1 and C2 summary

This was achieved by taking the 'Summary' sections at the end of each question and simplifying them into a table (Table 4.25). This summary (which assists in reducing the data) still presents C1 and C2 **separately**, and according to each section (Sections 4.3.1 to 4.3.10). The summaries for all three reserves are used in the cross-case analysis (Chapter 7). Various notations are used to aid the summary that follows, namely > (greater than), = (equals), and & (and).

Table 4.25: C1 and C2 summary: Dinokeng Game Reserve/Kekana Gardens community

| C1 | C2 |
|---|---|
| **KNOWLEDGE AND EXPERIENCE OF PROTECTED AREA** | |
| Poor to average knowledge of reserve. An unknown entity to most | |
| The few who have entered report very positive experience & feelings | |
| Aware of Big Five but some confusion surrounds types of animals within | |
| Clear desire for information on reserve & how to access it | |
| See reserve as source of learning & want to benefit from this | |
| Community leaders have more knowledge of what goes on in DGR & were more vocal on lack of information/access | |
| **RELATIONSHIP BETWEEN COMMUNITY AND PROTECTED AREA** | |
| Very real fear of snakes which are regularly killed (also culturally influenced) | Mention initiatives that improve relationship |
| Distrust safety of boundary wall | Acknowledge that C1 is dissatisfied with benefits (more than C1 itself does) BUT … |
| Do not think in terms of benefits due to historical context | Note constraints of large ill-defined community, young reserve, political dynamics & unrealistic expectations |
| Desire employment & frustrated by employment of non-locals | |
| Largely unaware of specifics of community projects, but appreciate those they know of | |
| Some acknowledge intrinsic appreciation of nature & importance of conservation | |
| Both want more collaboration & better relationship | |
| Very vocal in request for: collaboration; communication; information; & access | See it as a partnership more than C1 |
| Want to feel part of it | |
| Want information on: how to handle situations with dangerous animals; access to reserve; animals & conservation | |
| More references to poaching (linked to relationship & poverty; bush meat hunting seems common & not always seen as a crime; interested in working at decreasing poaching if have better relationship) | Fewer references to poaching (when have relationship of trust with C1, poaching is reported to them) |
| **POSITIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| | Mention several education/training initiatives |
| Facilities & infrastructure have improved due to presence of reserve | |
| Notice the more intangible positive changes of: enjoyment of reserve; inter-cultural contact/exposure & increased pride | Environment is being conserved (success story) |
| Acknowledge that some are improving their lives through employment in reserve | Some are benefiting by improved skills through employment, small-scale initiatives & aiding partnerships |
| Community leaders acknowledge DGR as the reason for certain positive changes accrued | Challenges are staff retention & employing locals (initiatives in place to improve the latter) |
| **NEGATIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| Strongly acknowledge negative changes: loss of access to natural resources & lack of access to reserve | Some understanding of negative changes felt by C1, but need wider C2 to identify with negative changes perceived by C1 |
| Sense of exclusion from: natural resources; access; & information on reserve | |
| **INCREASING POSITIVE ATTITUDES TOWARDS PROTECTED AREA** | |
| Desire information/education & involvement/interaction because want to know & understand importance of reserve. This results in increased sense of involvement | Aware of need for information/education & involvement/ interaction – but perhaps not of how earnestly C1 desire this |
| | Acknowledge power of enjoying/accessing reserve as means to increase positivity |
| C1 have sense of ownership & want to feel ownership. C2 know this is important. | |
| Employment will increase positivity. Dissatisfaction that non-locals are employed | Reserve tries to assist but benefits too few for large community & reserve in infancy. Simple solutions can help (e.g. vegetable garden) to assist people & change attitudes |
| Request support to help meet certain basic needs | Government involvement helps, but lengthy time frames deter & affect positive attitudes |

| C1 | C2 |
|---|---|
| **OTHERS' VIEWS ON PROTECTED AREA** | |
| Some are negative, some are positive | |
| Negative because: afraid of animals & distrust boundary wall; lack information; want land/resources for other purposes; & lack employment (frustration that non-locals are employed) | |
| Positive because: employment has improved quality of life for some | |
| Positive, but want more interaction, involvement & educational opportunities | |
| **RESPONSIBILITIES TOWARDS PROTECTED AREA** | |
| Clear sense of responsibility towards wall (to protect reserve & for own safety) | Feel that C1 do not have any responsibilities |
| Uncertainty over who to call if animal escapes | |
| **BENEFITS DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Top: Employment > Learning/training about animals (mix of tangible & intangible benefits identified) | Top: Learning/training about environment & Employment (mix of tangible & intangible benefits identified) |
|  | |
| Appears to be an increase in environmental awareness | |
| Aware that benefits accrue from tourism/tourists | |
| Enjoy reserve & go there to see animals | |
|  | |
| **LOSSES DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Top: Fear of wild animals > Lack of information/contact > Insufficient employment & Lack of access to firewood | Acknowledge very few losses |
| Lack of access to natural resources emerges but is not a major issue | |
| **DREAMS FOR AN IDEAL FUTURE** | |
| Top: Desire close interaction with reserve (intangible benefit) | Top: Community projects & financial aid |
|  | |
|  | |
| | Training opportunities exist but must be marketed to increase uptake |
|  | |
| Want to know what to do if animal escapes → | C2 should address |
| **CROSS-QUESTION ANALYSES** | |
| C1 identify more benefits than losses, & equal number of positive & negative changes | When including C2's answers, benefits & positive changes increase far more than losses & negative changes, i.e. C2 is largely positive regarding what C1 get from reserve |
| Community appear to be more positive than negative | C2 differ greatly to C1 in terms of acknowledging losses & negative changes. Need to be aware of what C1 perceive as losses & address |
| Significant difference in responsibilities: C1 feel they have responsibilities, but C2 feel they do not | Differences in what C1 & C2 note as positive changes: agree on facilities & infrastructure, but C1 focus on intangibles of enjoying reserve, inter-cultural contact, exposure & pride; while C2 focus on education/training & employment |
| C1 far more vocal on relationship, with most quotes relating to challenges & aspects that they desire in the relationship | C2 also vocal on relationship, outlining initiatives, desire for more collaboration & challenges |

### 4.4.3 Dinokeng Game Reserve/Kekana Gardens community summary

The final step in each of the case study chapters is to combine the results from C1 and C2 to create a holistic summary for this case study, which reduces the data further. This was done by using Table 4.25 to extract the necessary information to answer the research aim for **this** case study. The reader is reminded that the research aim for the study is to **identify, investigate and represent the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas**.

The answer to the research aim for the Dinokeng Game Reserve/Kekana Gardens Case Study is divided into:

- context (taken from the cross-question analyses);
- present situation ['We are positive (+) because ...' and 'We are negative (–) because ...'];
- factors that could make local people more positive (+) in the future; and
- constraints (challenges identified in the analysis).

In addition to '+' and '–', various notations are used to aid this summary, namely > (greater than), = (equals); LC (Local Community) and & (and). The direction of the thumb also indicates the overall level of positivity for this particular case study.

Figure 4.13 thus presents the Dinokeng case study summary. This contributes to the cross-case analysis in Chapter 7. In Chapter 8, the holistic answer to the research aim and question (drawn from **all three** case studies) is provided in the form of a theory and a framework.

## DINOKENG GAME RESERVE/KEKANA GARDENS COMMUNITY

**What influences attitudes and behaviour of local community towards protected area?**

**CONTEXT = MODERATELY POSITIVE**

Benefits > Losses

Positive & Negative Changes are close in number

Here & Now

Tangible & intangible benefits

| WE ARE ✚ BECAUSE | WE ARE ▬ BECAUSE |
|---|---|
| Appreciate the community projects we know about | Snakes are a regular problem. Fear for safety & unaware how to respond |
| Improved infrastructure due to presence of reserve | Lack information/communication on the reserve |
| The few who have entered, thoroughly enjoyed the experience | Desire more interaction with landowners & reserve |
| Increased inter-cultural contact/exposure | Lack access to reserve |
| Increased pride | Lack access to natural resources |
| Some employment & entrepreneurial opportunities | Desire employment, and are unhappy that non-locals are employed |
| Learning/training opportunities regarding the environment | Sense of exclusion: from information, collaboration & access |
| Know that conservation is important | |
| Tourism brings benefits | |

FUTURE

| THESE COULD INCREASE ✚ |
|---|
| More information on reserve (this was a strong request & more realistic to fulfil than employment) |
| Want to be involved & have sense of ownership |
| Want to know how reserve can be accessed – information & marketing important |
| Desire environmental education. Want to learn from reserve. LC very interested in the animals |
| Want information on: who to call & how to respond if animals escape; & which snakes are dangerous |
| Reserve can communicate all initiatives & programmes to LC, so that they are seen as benefits (LC largely unaware at present) |
| Improve safety of boundary wall & reassure community |
| Reserve should acknowledge losses & negative changes voiced by LC & address with environmental education & information |
| Increased employment opportunities. Avoid employment of non-locals which causes negativity |
| More community upliftment/basic needs assistance |
| More opportunities to sell/showcase crafts |
| Acknowledge/encourage LC's self-imposed sense of responsibility/custodianship towards reserve |
| Focus on building intangible benefits such as more interaction, reserve enjoyment, inter-cultural contact, exposure & pride (these are important to LC) |
| Market current training opportunities (from reserve & government) to increase uptake |
| A better relationship could decrease bush meat poaching & increase understanding that it is a crime |

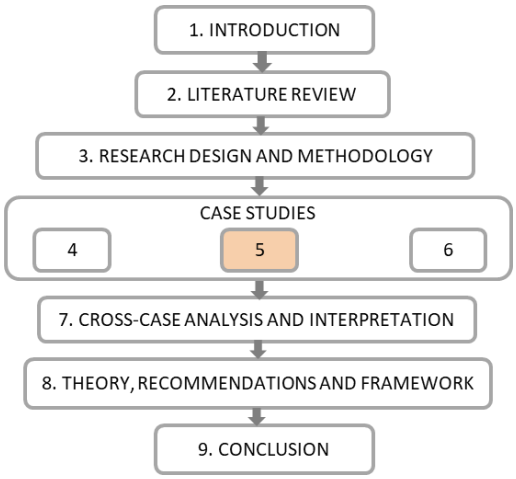
**CONSTRAINTS**

Large ill-defined community; new reserve; political dynamics; unrealistic expectations; lengthy government time frames; staff retention

Figure 4.13: Dinokeng Game Reserve/Kekana Gardens community summary

Chapter 5

# Case Study 2: Mkhambathi Nature Reserve and Khanyayo community




*"Natural capital is not just a thing of beauty, but a driver of socio-economic development [with the] objective to give communities across the continent a real, tangible stake in wildlife management".*

(Edna Molewa, late Minister of Environmental Affairs, at the 2018 African Ranger Awards)

## 5.1 Introduction

This chapter provides a brief background to Mkhambathi Nature Reserve and the Khanyayo community, followed by a detailed description of the results emanating from the data collected for this case study. Results are presented and analysed question by question, each ending with a summary, followed by a few cross-question analyses. At the end of the chapter, these summaries are used to create a summary for each constituency (C1 and C2), followed by a holistic summary for Case Study 2. This process is followed in all three case study chapters, and constitutes 'Analysis and interpretation layer 1' (Figure 1.3).

Mkhambathi was chosen as one of the case studies for this research because, in terms of the management and ownership structures, it is a provincial reserve on land owned by the surrounding local communities who won their land claim. It is a joint management venture between Eastern Cape Parks and Tourism Agency and the Mkhambathi Land Trust, constituted by community members. There are currently only a few mid-range accommodation options available in the reserve, but a private company (Mkambati Matters) is due to develop luxury accommodation in a section of the reserve. Regarding the level of improvement in human wellbeing for surrounding communities, reserve staff have been interacting with the community for a number of years and run various economic and social upliftment programmes. However, due to several challenges, the relationship with the communities surrounding the reserve has not always been easy.

## 5.2 Background to Mkhambathi Nature Reserve and Khanyayo community

### 5.2.1 Location and constitution of nature reserve

Mkhambathi Nature Reserve (MNR) is a 7 720 ha reserve in the Eastern Cape, on the coast of north-eastern Pondoland between the towns of Port Edward and Port St Johns. The reserve falls within the

former Transkei homeland, and is accessed via the R61, with the last 30 kms being dirt road. It consists of coastline (Indian Ocean), open grassland with patches of indigenous forest and swamp forest. MNR has several grazing herbivores such as Eland and Blesbok and is known for its large natural rock pools and spectacular waterfalls, one of which falls into the ocean (Eastern Cape Parks and Tourism Agency, 2015). The coastal section of the reserve is also protected, with the Pondoland Marine Protected Area having been proclaimed in June 2004 (Mann, Celliers, Fennessy, Bailey & Wood, 2006). Figure 5.1 depicts the location of the reserve and community within the Eastern Cape, while Figure 5.2 indicates the reserve's position relative to the Khanyayo community.


Figure 5.1: Mkhambathi Nature Reserve and Khanyayo within Eastern Cape province

Mkhambathi falls within the Maputaland-Pondoland-Albany biodiversity hotspot, internationally recognised for its high levels of endemism and species richness (Minin, Hunter, Balme, Smith, Goodman & Slotow, 2013). The rare Mkhambathi Palm (*Jubaeopsis caffra*) gives its name to MNR, and is found on the northern banks of the Msikaba and Mtentu river (Queiros, 2000). MNR is the only place where this palm occurs naturally (Prinsloo, 1999).

The reserve name used to be spelt as 'Mkambati' but was changed to 'Mkhambathi' after 1994. Both versions are still found in literature. The reserve is a provincial nature reserve, falling under the Eastern Cape Parks and Tourism Agency (ECPTA). It has 27 staff who play various roles in conservation and tourism.[11]

11. Personal communication with Mr Lwazi Khuzwayo (current Reserve Manager) via email on 1 October 2017.

To the west of the reserve lies 11 000 ha of state land which was allocated to a government parastatal known as TRACOR (Transkei Agricultural Corporation) in 1982. The TRACOR land is shown in Figure 5.2. It was used for sugarcane, and later for cattle farming (Mkhambathi Land Trust, n.d.). Today, apart from a community forestry project with Sappi, the area is currently largely unutilised (Mkhambathi Land Trust, n.d.).

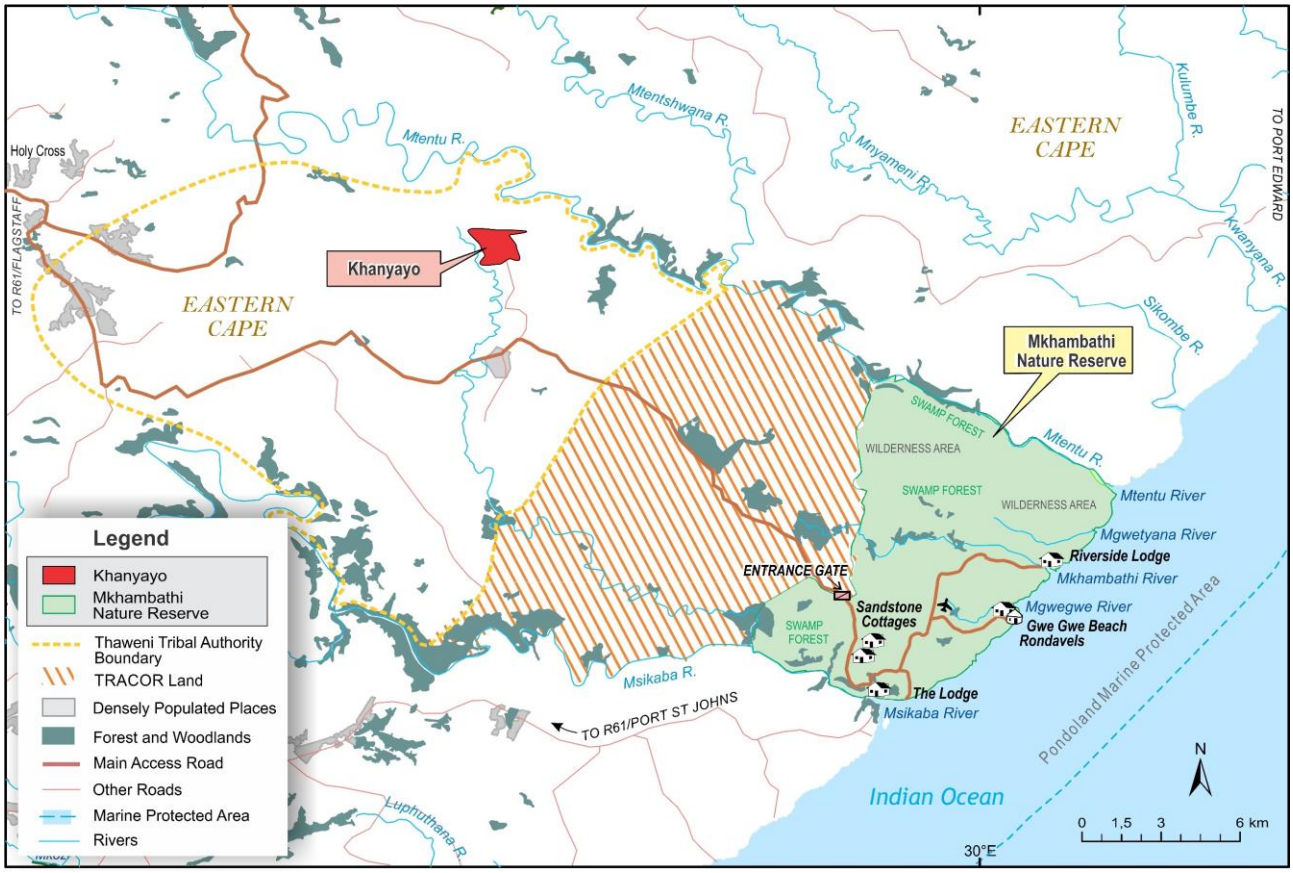



Figure 5.2: Mkhambathi Nature Reserve and Khanyayo

### 5.2.2 Tourist accommodation

At the time of writing, accommodation consists of a few self-catering options. A large sandstone lodge (The Lodge) with a sweeping view of Main Beach and the Msikaba mouth, sleeps ten people. Located nearby are two sandstone cottages which sleep six people each. There are additional accommodation options in this area, but these are presently non-operational. The cottages and lodge are currently co-managed by ECPTA and the Mkhambathi Land Trust (MLT). On the banks of Gwe Gwe Beach are several basic rondavels, which were a favourite for fisherman. A few metres away on the banks of Mgwegwe River is a large house (Riverside Lodge), which sleeps 16. However, Riverside and Gwe Gwe rondavels are currently under development with a private company called Mkambati Matters (Pty) Ltd and can no longer be booked through ECPTA.

### 5.2.3 Local community

Beyond the TRACOR land lies the predominantly rural communal settlement under tribal ownership, which makes up the Khanyayo Administrative Area (Fihlani, 2016; Kepe, 2007). It contains seven villages within this area inhabited by the Khanyayo people, who speak isiMpondo, a Xhosa dialect (Kepe, 2007). Each village is led by a sub-headman who reports to the headman of the Khanyayo Administrative Area (Kepe, 2007). The seven villages are Khanyayo, Mtshayelo, Rhamzi, KwaCele, Thahle, Ngquza and Vlei (Zeka, 2011) which today form part of the MLT, and constitute the Thaweni Tribal Authority (TTA) (Kepe, 2004). The MLT has a board of trustees referred to as the 'Mkhambathi Board of Trustees' or 'Board of Trust' consisting of two community members from each of the seven villages. The village/community closest to the reserve is Khanyayo (Kepe, 2008), approximately 17 kms away, in which the research was conducted. Figure 5.2 shows the Khanyayo community and the TTA boundaries.

The reserve falls under the jurisdiction of the Ingquza Hill Local Municipality. Of the population within this municipality, 43% is 14 years or younger, while 51% is between the ages of 15 and 64 years (OR Tambo District Municipality, 2017). The area has low educational levels and poor literacy rates, with only 12.7% having a matric, and 5% holding post-matric qualifications. Functional literacy is estimated at 48% (Fihlani, 2016; OR Tambo District Municipality, 2017). The unemployment rate is approximately 41% (OR Tambo District Municipality, 2017), with over 97% of households living on less than R800 per month (Fihlani, 2016).

There are two additional communities which border the reserve, namely the Mdengane and Amadiba people, on the riverine boundaries of the Msikaba and Mtentu Rivers respectively. These two communities, however, do not form part of the MLT.

Inhabitants of the villages within the TTA generate their livelihoods from a combination of livestock and arable farming, as well as collecting natural resources and off-farm resources such as remittances and pensions (Kepe, 2007).

### 5.2.4 History

In 1899 the chief of the Mpondo kingdom agreed with the government that a portion of land in Eastern Pondoland could be used as a leper colony (Kepe, 2004). In 1919, an area of approximately 18 000 ha between the Msikaba and Mtentu Rivers was identified for the Mkambati Leper Reserve. In 1920, Khanyayo people living within the demarcated area were forcibly removed and collection of plant resources, hunting and grazing forbidden (Kepe, 2004).

Since that time, there has been a long history of conflict between the reserve and surrounding communities. From 1924 to 1956, the Khanyayo people regularly cut the fence to graze their cattle and

collect natural resources such as wood and thatch within the reserve (Kepe, 2004). The altercations between leper reserve and local people were apparently serious enough that a proposal was made to return 5 500 ha of grazing land to the Khanyayo people, but this did not materialise (Kepe, 2004). When leprosy decreased in the 1950s, the hospital became a tuberculosis treatment centre (Queiros, 2000).

In 1976, with the independence of the Transkei homeland[12], the leper colony closed and the area fell under the jurisdiction of the homeland's Department of Agriculture and Forestry (Kepe, 2004). The coastal third became a nature reserve, while the remaining two-thirds became a state farm managed by TRACOR (Kepe, 2004). The reserve section was first run by two private companies as a hunting concern (Prinsloo, 1999) and taken over by government in 1982. Many refer to this period as the heyday of Mkhambathi with an airstrip, The Lodge as a thriving guesthouse, several self-catering units, a shop and clubhouse – all generating many employment opportunities.

Between 1988 and 1989, funds were misappropriated, and the government stepped in to protect MNR in a bid to, among other things, curb illegal hunting. As a tourism establishment, this marked the beginning of a decline which continues today. Facilities deteriorated, and the shop and clubhouse closed (Queiros, 2000).

In 1990, as political changes shook the country, Khanyayo residents challenged TRACOR regarding grazing rights and received 3 500 ha of grazing land. This was followed by the ANC (African National Congress) branches of Khanyayo and other nearby villages occupying MNR for nine days in August 1992, demanding their land rights. Although the formal land claim from the Khanyayo people (for both reserve and TRACOR land) was only gazetted in June 1998, the government agreed to open a small section of the previous leper colony as a community clinic, which took place in 1996 (Kepe, 2004).

The Khanyayo's land claim was, however, disputed by the other six villages comprising the TTA, who together lodged a counter-claim. Conservation was severely affected during this time, as the TTA forcefully occupied buildings within the reserve, and the poaching of flora and fauna within MNR by the Khanyayo people, increased. Herds of wild herbivores were driven over the cliffs and vegetation was often burnt (Kepe, 2004).

The government initiated 'Wild Coast Spatial Development Initiative' entered the arena in 1995. The idea was to inject development and investment into poverty-stricken districts, and Mkhambathi was chosen as a focus area. In theory, rightful owners of land claimed would benefit directly from large scale investment in ecotourism (Kepe, 2004). The idea was to create employment, have rental income for the community from investors, and create opportunities for entrepreneurship. The land claimants were encouraged to withdraw their claims in exchange for the promise of development. However, plans fell

12. The concept of 'homelands' was explained in Chapter 4. The Transkei (meaning 'across the Kei River') was one of the former homelands created for the Xhosa people.

apart after four years of planning, with one of the challenges being the struggle to attract appropriate investors (Kepe, 2004).

In 2001, the Land Claims Commission conducted a study which resulted in 326 households being identified as descendants of those originally removed from the reserve, who would be financially compensated. It also ruled that the approximately 6 000 households[13] (Kepe, 2012) of the seven villages within the TTA would together share joint management and have joint land rights over Mkhambathi, receiving financial and other benefits. In October 2004, the formal handover of reserve and TRACOR land to the MLT took place (Kepe, 2012).

In 2003, the Department of Environmental Affairs and Tourism awarded a tender to two private companies (Wilderness Safaris and Mantis Collection) to develop two different sections of the reserve respectively. Cumulatively the companies planned to invest up to R500 million over 10 years by developing tourism; while the communities who were part of the land claim stood to gain 46% of net profits or 9% of turnover, a 30% stake in the business, 30% of dividends and 500 permanent jobs (Miles, 2007). However, after prolonged wrangling, both private investors pulled out. It is difficult to ascertain the reasons for this, but Miles (2007) reports that: the Eastern Cape Tourism Board refused to recognise the community's ownership of the land in fear it would lose control of the reserve; senior officials from OR Tambo municipality put pressure on the claimants to channel funds through its development agency (which some were skeptical was a front for enrichment of senior politicians); and the Member of the Executive Council (MEC)[14] at the time refused to endorse the project. Marais and Du Toit (2007) confirm that the MEC at the time had stonewalled the development and complicated the deal in bureaucratic red tape and delays. They state that the MLT were "incandescent with rage" over the collapse of the deal and the unrealised profits, jobs, community projects, and a clinic and children's educational camp that had been promised. The reserve manager at the time also pointed to the political dynamics in the Eastern Cape at that time, as being a reason for the withdrawal of Wilderness Safaris, while Mantis Collection ran into financial challenges after a main partner withdrew. Unfortunately, Mantis Collection had begun demolishing buildings in preparation for their new camp, before it lost its key investor[15]. As a result, ECPTA were left with some unusable structures and in a worse position than before.

Kepe (2004) mentions the struggle over who would represent the villages in the MLT as they negotiated with investors. This struggle continues today, as villagers complain that the board does not keep them informed of what is going on. At the time of writing, the promises of the spatial development initiative remain largely unfulfilled. Following the collapse of the original two investors, a new investor (Colin Bell via Mkambati Matters) is in the process of developing the area at Gwe Gwe beach. The ECPTA struggle to keep Mkhambathi going on a limited budget and bureaucratic rules that delay any repairs.

13. More recent statistics based on the most recent National Census (2011) are unreliable.
14. The Executive Council is the cabinet of provincial government, elected by the premier of each province.
15. Personal communication with Mr Vuyani Mapiya (previous Reserve Manager) via email on 11 May 2017.

The partnership between ECPTA, the MLT and Mkambati Matters has potential to bring benefits to both local people and the environment. As stated by Colin Bell, *"this should become a bench-mark catalyst for community upliftment through wildlife conservation in that region … This Mkhambathi project will increase the amount of land under formal conservation while better protecting one of the planet's biological "hotspots" and at the same time to sustainably uplift the lives of about 40,000 of some of the poorest South Africans"* (Passage to Africa, 2013:1).

## 5.3 Results and interpretation

Section 3.10 in Chapter 3 provides an orientation to the three case study chapters. Table 5.1 reminds the reader of pertinent information regarding the participants in Case Study 2 and the data collection methods used. Presentation of results and data analysis, for each question that was asked of participants, follows in Sections 5.3.1 to 5.3.9. Questions 1, 6 and the drawing activity are discussed together in Section 5.3.1 as they all relate to C1's knowledge of the reserve. Thereafter, the questions are discussed in the order in which they were asked since they progress from the more general to the more specific. Section 5.3.10 contains some cross-question analyses, followed by Section 5.4, which concludes the chapter. Case Study 2 is abbreviated as MNR/K (for MKhambathi Nature Reserve/ Khanyayo community).

Table 5.1: Case Study 2 participants and data collection

| | C1 | | | C2 |
|---|---|---|---|---|
| | **FGI 1** | **FGI 2** | **FGI 1 & 2** | |
| **Number** | 15 | 12 | 19* | 5 |
| **Gender** | 11 F, 4 M | 10 F, 2 M | 13 F, 6 M | 1 F, 4 M |
| **Method** | FGI & mapping | | NGT & Q14-10 via group interview | II |
| **Data collected on:** | 29 December 2015 | | | 27, 29 & 30 December 2015 |

* Eight participants left before the NGT session.

### 5.3.1 Knowledge and experience of protected area

Three groups of questions were used to investigate C1 participants' knowledge and experience of the reserve and are therefore all included in Section 5.3.1. Table 5.2 provides an orientation to these questions. C2 did not answer these two questions or do the mapping activity, as the purpose of these was to determine community members' knowledge and experience of the reserve.

Table 5.2: Orientation to Questions 1, 6 and mapping: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q1 / K=Knowledge | Y | N | What do you know about this nature reserve? What is inside this reserve? What can you do in there? | FGI | Section 5.3.1.1 |
| Q6 / E=Experience | Y | N | Who of you have been into the reserve? What do you go in for? What did you think of your experience? | FGI | Section 5.3.1.2 |
| Q Drawings / Dr=Drawings | Y | N | In a group, draw a map of the reserve and your community. | Mapping | Section 5.3.1.3 |
| **Research Objective** | | | 2 | | |

### *5.3.1.1. Knowledge of nature reserve*

#### *A. Overview: Knowledge of nature reserve*

Table 5.3 indicates the results for Q1 on 'Knowledge of nature reserve'. When combining the results of C1 Focus Groups 1 and 2, the codes containing the highest number of quotes were 'Make-up and history of reserve' and 'Resources: LC can't access'. As with Dinokeng, C1 Focus Group 1, consisting of several community leaders, generated significantly more quotes than C1 Focus Group 2, which constituted younger, mainly female participants.

Table 5.3: Code frequencies for 'Q1 Knowledge': MNR/K

| | C1 | | |
|---|---|---|---|
| **CODE (K=Knowledge) (WCPD=What Can People Do)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| K: Accommodation | 1 | 0 | 1 |
| K: Animals | 1 | 1 | 2 |
| K: Good communication between reserve and local community | 2 | 0 | 2 |
| K: Make-up and history of reserve | 9 | 0 | 9 |
| K: Resources: Local community can't access | 3 | 2 | 5 |
| K: Resources: Local community can access | 0 | 1 | 1 |
| K: Tourism | 1 | 1 | 2 |
| K: WCPD: Beaches/sea | 1 | 1 | 2 |
| K: WCPD: Fish | 1 | 1 | 2 |
| K: WCPD: Flora | 0 | 1 | 1 |
| K: WCPD: See animals | 0 | 2 | 2 |
| K: WCPD: Swim | 0 | 1 | 1 |
| K: WCPD: Swim in rivers | 1 | 0 | 1 |
| K: WCPD: Waterfalls | 0 | 1 | 1 |
| **TOTALS** | 20 | 12 | **32** |

***B. Specifics: Knowledge of nature reserve***

***(a) Make-up and history of reserve***

The code with the highest occurrence was 'Make-up and history of reserve' (nine quotes). All nine of these quotes came from C1 Focus Group 1 which comprised the chief and other leaders. This group had a sound knowledge of the composition of MNR, such as the fact that it is divided into nature reserve and TRACOR land (P355, 22:22), has good soils (P355, 56:56) and poor roads (P355, 144:144). However, the majority of quotes within this code (six) pertained to the history of the reserve. Participants alluded to the fact that there used to be a leper hospital/clinic, post office, jail, butchery, more employment opportunities and that the reserve was formerly in a better condition (All in P355 – 73:73; 103:103; 111:111; 115:115; 116:116; 119:119). Participants lamented the 'downfall' of the reserve: *"Before, there used to be employment … opportunities, in both the game reserve and … TRACOR"* (P355, 73:73) and *"It was better long ago. Mkhambathi was better. Now it's worse"* (P355, 115:115).

It is interesting that no comments were made regarding this code by C1 Focus Group 2, who were generally younger.

***(b) What can people do there?***

C1 Focus Group 2 had more to say regarding what people could do inside the reserve (WCPD) (seven quotes as opposed to the three quotes from Focus Group 1). C1 Focus Group 1 referred to visiting the beach and fishing (P355, 32:32; 43:43) and swimming in rivers (P355, 35:39). C1 Focus Group 2 spoke about the sea and swimming (P356, 20:20; 29:29), viewing plants and animals (P356, 20:20; 27:27; 31:31), seeing waterfalls (P356, 22:22) and fishing (P356, 33:33). This shows awareness of what tourists and community members go there to do, for example "*They want to see the nature, the type of animals that are there"* (P356, 27:27) to specifics such as "*And the different birds like vultures and sea birds"* (P356, 31:31).

The presence of nature also emerged in two quotes (P355, 96:96; P356, 20:20) in the beginning of this question, when the researcher first asked "What do you know about this reserve? What is inside this reserve?" The topic of tourism and lodges was also mentioned here (P355, 96:96; P356, 25:25). Nature was addressed again when the researcher got more specific and asked "What can you do in there?" (as discussed in the preceding paragraph).

***(c) Access to natural resources***

The next code with a higher occurrence was 'Resources: LC can't access', containing five quotations (three from C1 Focus Group 1 and two from C1 Focus Group 2). There were two references to not being allowed to collect medicinal plants ('muti'). Both these participants also stated that people know the rules – that they cannot collect these plants: *"We know that us people, we're not allowed to dig for muti things, because it's under conservation"* (P355, 51:51); and *"... the villagers … tend to go to cut*

*medicines there, but they are aware that this is not allowed, so that means the laws are still there …"* (P355, 132:132).

Interestingly, there were three references to the fact that communities may not hunt in the reserve, but one participant elaborated that people do not know this, especially the older uneducated generation (but adds that these people do not necessarily hunt because the reserve is far from the village) (P356, 190:196). Another female built on this comment, stating that a community imbizo[16] should be organised to spread the word that one cannot hunt in Mkhambathi (P356, 198:198).

Under the code 'Resources: LC can access', *"you can cut grass"* is mentioned (P356:38:38). Grass cutting (collection of thatch grass) emerges strongly later in this case study.

***(d) Communication between reserve and community***

Another code that is less frequent but relevant to the study was 'Good communication between reserve and local community'. Two positive references were made by Focus Group 1 that people are aware of the rules [*"people are well aware of what they are not supposed to do"* (P355, 129:130)]; and that there is communication between the reserve and the community (P355, 137:137).

***C. Summary: Knowledge of nature reserve***

Participants have an average to good knowledge of the reserve. Community leaders talked more about the make-up and history of the reserve, while the younger people were more vocal about what people could do in the reserve. Participants realise that nature is the focus. Resource access emerges as an issue, with some confusion surrounding it.

### *5.3.1.2 Experience of nature reserve*

***A. Overview: Experience of nature reserve***

The data resulting from this question (Q6) are shown in Table 5.4. No significant differences appeared between Focus Group 1 and Focus Group 2, and the data are hence generally analysed together.

Experiences of going to the reserve for the beach/swimming featured most (with five quotes), followed by going to see animals (three quotes), and resources and waterfalls (one quote each). The remaining two quotes related to specific feelings voiced by participants and are coded as 'Feel …'. In this case both are overtly positive feelings.

16. The term is originally derived from the Zulu, and refers to an important meeting/assembly, usually called by the traditional leader or king (Adapted from Collins English Dictionary, 2017).

Table 5.4: Code frequencies for 'Q6 Experience': MNR/K

| | C1 | | |
|---|---|---|---|
| **CODE (EX=Experience)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| EX: Feelings expressed | 1 | 1 | 2 |
| EX: For: Animals | 2 | 1 | 3 |
| EX: For: Beach/swimming | 2 | 3 | 5 |
| EX: For: Resources | 1 | 0 | 1 |
| EX: For: Waterfalls | 0 | 1 | 1 |
| **TOTALS** | 6 | 6 | **12** |

## *B. Specifics: Experience of nature reserve*

### *(a) Who has been in and how often?*

In each focus group, the researcher asked who of them had entered the reserve before. In Focus Group 1, 13 out of the 15 participants had been into the reserve (P355, 481:481); while in Focus Group 2, 11 out of 12 had entered (P356, 136:136). Most community members go once a year, on New Year's Day (P355, 537:537). They pay for bus fare but entry into the reserve is free. When asked why they did not go more often, the response was *"Because we don't have cars to go there ...There's no transport"* (P355, 542:545). Although participants live in the closest village to the reserve, Khanyayo, it is still approximately 17 kms from the reserve gate.

### *(b) Specific experiences*

Five participants mentioned that they had gone to the reserve for the **beach and swimming**, for example: "*Ja, [the beach is] the big thing. That's the only thing*" (P355, 486:486). In both focus groups, participants were unanimous about the beach being the main attraction and reason for visiting.

In Focus Group 1, the researcher asked for a show of hands to indicate who had gone to the reserve to see **animals**. Eight out of 14 put up their hands (P355, 502:502). A participant commented: *"Many of us we went there to see animals"* (P355, 483:483). It was also mentioned in Focus Group 2: *"We went to see animals"* (P356, 142:142).

The only other specific experiences mentioned were going to see the **waterfalls** (P356, 142:144) and for natural resources, in this case collecting **grass** for thatching the roofs of huts: *"We're also going for fetching the thatch grass"* (P355, 504:504).

### *(c) Feelings expressed*

The 'Feelings expressed' were in response to the question, 'Did you enjoy going into the reserve?' In Focus Group 1, a female participant replied that it was "*fantastic*" (P355, 531:532). In Focus Group 2,

the reply to the same question was an enthusiastic chorus of "*yes*" from the participants (P356, 152:153). Bear in mind that this was the younger group.

***C. Summary: Experience of nature reserve***

It is important to note that most C1 participants have visited the reserve before. It was clear from the interaction with them that they thoroughly enjoy visiting the reserve when opportunities arise. It is a highlight in their calendar. The beach is the main reason for visiting, but seeing animals is also important.

#### *5.3.1.3 Mapping*

Due to the nature of this question being quite different, the overview and the specifics are dealt with together.

***A. Overview and B. Specifics: Mapping***

The maps drawn by the two focus groups are shown in Figures 5.3 and 5.4. The two maps were fairly similar in terms of showing the same level of detail for the reserve and their community (P368, @728-@99; P369, @526-@54). The level of detail was average (neither minimal nor exceptional).

For the community, both groups indicated landmarks such as homesteads, the school, shop and clinic.

In terms of the reserve, for natural landscape features, Focus Group 2 drew several rivers (the two large boundary rivers and three far smaller rivers), two waterfall sites, the ocean, trees and four large animals which they labelled (P368, @259-@96). Focus Group 1 had slightly less detail and drew the two boundary rivers and one large animal (P369, @238-@68). Focus Group 1 also depicted accommodation, namely 'The Lodge', which was drawn as three huts (it is actually a large sandstone house) (P369, @262-@209). It is possible that most of the participants would not have not seen The Lodge since it is tucked out of the way. In terms of human-made landmarks, Focus Group 1 indicated major roads, the office and main gate (P369, @263-@135); while Focus Group 2 just showed the office (they focused more on natural elements) (P368, @256-@230).

***C. Summary: Mapping***

The overall impression is that the participants were aware of several features related to the reserve and represented the reserve at a similar level of detail as their community, showing familiarity with **both**. This is positive. As discussed in Section 5.3.1.2, most participants had visited the reserve, which also accounts for the level of detail on the maps.

Section 5.3.1 contributes towards answering Research Objective 2.

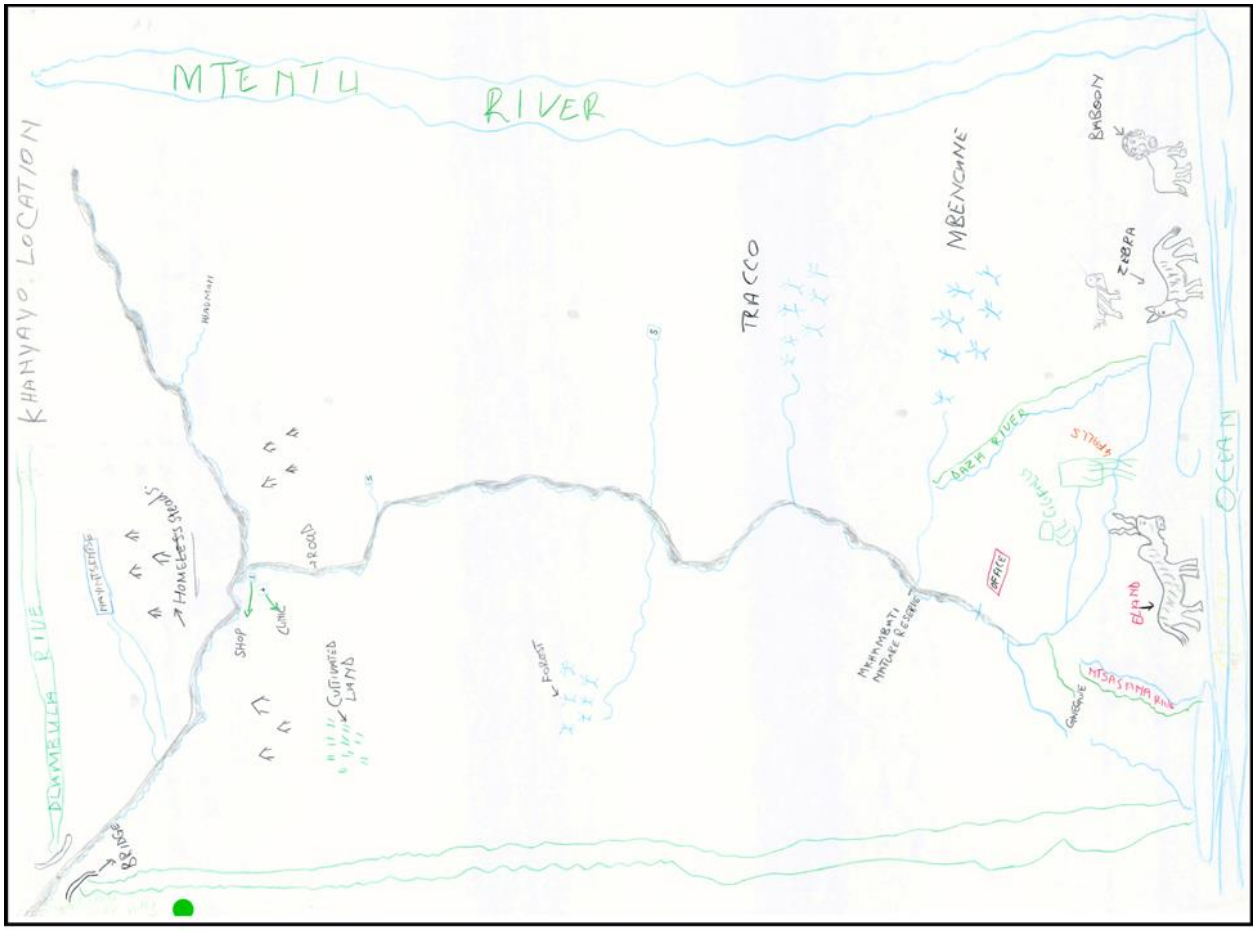



Figure 5.4: Map drawn by Focus Group 2: MNR/K

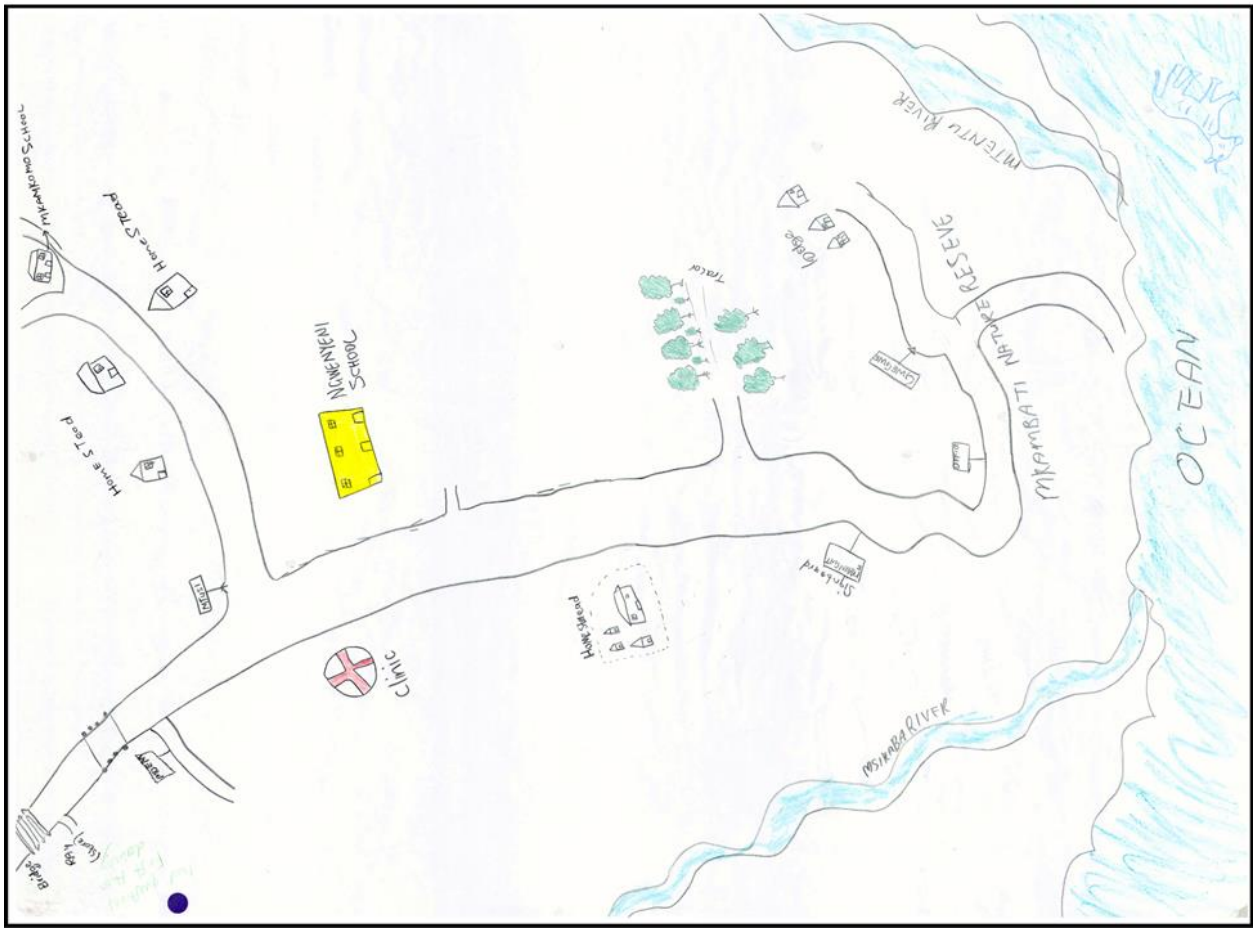



Figure 5.3: Map drawn by Focus Group 1: MNR/K

### 5.3.2 Relationship between community and protected area

Table 5.5: Orientation to Question 2-1: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q2-1 / R=Relationship | Y | | Tell me about the relationship between you and the nature reserve. How do you feel about living near the reserve? | FGI |
| | | Y | Tell me about your perceptions of the relationship between the local community and the nature reserve. | II |
| **Research Objective** | | | 3 | |

***A. Overview: Relationship between community and protected area***

Table 5.6 presents the data for this question.

Table 5.6: Code frequencies for 'Q2-1 Relationship': MNR/K

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (R=Relationship)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| R: Actions taken/planned by reserve | 0 | 0 | 0 | 21 |
| R: Appreciate actions taken by reserve | 0 | 0 | 0 | 2 |
| R: Appreciate reserve/resources | 3 | 1 | 4 | 2 |
| R: Desire better relationship with reserve/local community | 0 | 0 | 0 | 2 |
| R: Difficult to define community | 0 | 0 | 0 | 1 |
| R: Dissatisfied with benefits | 9 | 1 | 10 | 0 |
| R: Lack of knowledge/information/access | 1 | 0 | 1 | 1 |
| R: References to other environmental concerns | 0 | 0 | 0 | 4 |
| R: References to poaching | 0 | 2 | 2 | 12 |
| R: Relationship is fair to good | 0 | 0 | 0 | 7 |
| **TOTALS** | 13 | 4 | **17** | **52** |

More quotes emanated from C2 for this question (C1:17; C2:52). C2 participants mentioned seven times that the relationship was 'fair to good', while no quotes emerged under this code for C1. C2 also gave many references to 'Actions taken/planned by reserve' (21 quotes), while this did not feature at all in the C1 focus groups. In addition, C2 participants made more references to poaching (C1:2; C2:12) and four to 'Other environmental concerns'. From C1, the code with the most quotes was 'Dissatisfied with benefits' (10), but four other quotes from C1 participants alluded to appreciation of the reserve or its resources. Together, 14 references were made to poaching (C1:2; C2:12).

***B. Specifics: Relationship between community and protected area***

***(a) Actions taken/planned by reserve***

All 21 quotes here came from C2. What is clear is that many good initiatives that benefit the community are in place, but the community are either unaware of these or are not seeing them as benefits emanating from MNR. The projects mentioned by C2 include hiring locals to clear exotics, teaching local people about fire, revenue sharing, an Environmental Schools Competition where the winners visit the reserve, and sports development programmes. Out of the 21 quotations under this code, only two referred to actions planned for the future (increased future revenue sharing, and future open annual general meetings to identify issues from the community side and to amend the core management agreement if necessary). All other initiatives mentioned already take place either in the community or at the reserve. The following three quotes provide examples.

> *"The reserve set the programme for a football club whereby the youth are involved in the sport so that they cannot go down for poaching. They know that the reserve … plough … back to the community, because the reserve bought some soccer kit and netball kit and some balls and trophies and all that. [The reserve] go to the community [and] run the sport. Now … the community appreciate the reserve. They understand that the money that the reserve is receiving, it's coming back to them for their project. They are not going for poaching now. They are not damaging. They know that there are do's and don'ts in the reserve".* (P363, 23:23)

> *"We've got soccer and netball tournaments that we partake in the local communities and all the villages. … the core function … is environmental awareness, because on the prize awarding day … awareness … is broadly done to the community at large … to say, this is from Mkhambathi. Mkhambathi is not there only to protect, but it's also wanting to engage with the community and make them know that Mkhambathi is theirs. … it's their land … we're only here to manage"* (P364, 82:82).

> *"Sometimes we organise soccer games [with the] surrounding communities … So out of that … we're minimising that rate of poaching, because they know now we've got relationship, we've got friends in there … they know, that 'no, it's not Mkhambathi, they are isolated. We're also part of the reserve. We go there and … have fun and get treated like people'"* (P364:110:110).

***(b) Appreciation of reserve or its resources***

For the code 'Appreciate reserve/resources', six quotes emerged (C1:4; C2:2). The C2 quotes indicated that the community respect the reserve and want it to be there, for example *"there's not an issue of saying 'we didn't want this reserve'. Some people would say so but … the majority … would say that it is good to have it."* (P362:141:141). Regarding the quotes from C1, three related to the use and collection of natural resources (beaches, sand and firewood). Locals are allowed to collect sand and firewood in the TRACOR land[17]. An example of the appreciation of natural resources is: *"One for instance is actually the access to the beaches where people can go and enjoy any time they want"* (P355:213:213). The other quote shows an intrinsic appreciation of MNR: *"… we feel so special that the nature reserve is in our*

17. Personal communication with Mr Vuyani Mapiya (previous Reserve Manager) via email on 11 May 2017.

*community, in our location; and tourists have to come all the way from Johannesburg, all the inland areas to spend some quality time with their families in our place."* (P356, 48:48).

***(c) Dissatisfaction with benefits***

No quotes materialised from C2 for this code. Regarding the ten quotations from C1 under 'Dissatisfied with benefits', six specifically referred to minimal employment opportunities offered by Mkhambathi Nature Reserve. Three quotes mentioned how Mkhambathi and the TRACOR land have degenerated in comparison with previous years, for example:

> *" … looking at Mkhambathi then and … now – then Mkhambathi was progressing. … we used to have an airstrip … There were lodges that were looked after. There was a hospital … That created … a lot of employment opportunities for the people around. So people benefited directly as a result. And now things have changed. Things have fallen apart. Even the lodges they look like they are neglected. They are still there, but not in a good condition."* (P355, 196:196).

Two quotes relate to expectations not being met, for example:

> *"When you bring back the land it is because people's feeling is that we can do whatever we want because ... the land is ours. When people claimed back the land they wanted to put in investors so that Mkhambathi can be developed and a land trust was formed by us and other surrounding villages. But, unfortunately it appeared that Mkhambathi belongs to what? It's actually declared one of the biodiversity sites. And as a result we don't have proper rights. Actually it's still owned by the Minister of [Environmental Affairs, Eastern Cape Parks Board]. So in a way people feel that the land was never claimed. They just got money."* (P355, 354:354).

There also appeared to be differing ideas between C1 and C2 regarding the type of development that should occur. C1 participants wanted more development, shops, hotels, etc., while C2 opted for a lower impact, less developed status more befitting a nature reserve. One C1 participant stated: *"I think it's a sort of frustration because … people were expecting employment opportunities which didn't come. As a result now, like [another participant] is saying, maybe people will prefer that you don't develop. But the ultimate goal, people want to have Mkhambathi developed so that they can get employment opportunities. I think that's a ... big thing."* (P355:371:371). This polarity of views on how the reserve should be developed is also apparent in Section 5.3.4.

***(d) Communication challenges***

For the code 'Lack of knowledge/information/access', it is worth noting the problem highlighted by a C2 participant: *"There are still some challenges. Now it is communication. Communication amongst the community themselves, because all that we discuss, we discuss with the representatives [on the board of the MLT] and then we are also expecting the representatives to go back, and tell the people and come back with the feedback and if there is something that we need to change … But unfortunately … there is a … problem in terms of the report backs. … we want to assist them in terms of their report backs. Because we have seen that ... they are weak in terms of that, but that will affect us in the near future. Because we will be appearing as if we don't do anything whilst [we actually are doing things]"* (P362:177:177).

This challenge was mentioned several times by both C1 and C2 participants and is reflected on in later analyses.

***(e) Poaching and other environmental concerns***

While reflecting on the relationship of the local community with the reserve, the topic of poaching emerged strongly (C1:2; C2:12), but predominantly from C2. The C1 quotes referred to certain individuals' lack of awareness that animals may not be poached in the reserve; and to fear of the repercussions of reporting poachers [*"Well, they don't [report poaching], because if someone has noticed that you have reported him or her, that is too dangerous. It is possible for him or her to kill you. Although reporting is a good idea"* (P356,186:186)]. The quotes from C2 participants on poaching are diverse. The greatest poaching threat seemed to be in the Wilderness Area, where the poachers cross over from the other side of the Mtentu River. They burn the veld to promote better grazing which draws the animals closer to the river, and hence closer to the poachers (P364:161:171). Other comments suggested that poaching is either at the same level (P362, 260:261) or decreasing, often due to positive interactions with surrounding communities (P2, 28:28; P363, 23:23; P364, 110:110). One example is *"[There's a] strong relation between [environmental education] and many poachers coming into the reserve. When you educate the communities around there, [fewer] poachers come here to the reserve to poach animals and also [poach within the] marine protected area."* (P364, 105:105).

The reserve also has community informants who report suspicious behaviour (P2,136:136; P362, 283:283). For example, *"Even if there are poachers who are burning fires, they just call the reserve and report there is fire. If we see the fire next to the reserve, we see anonymous people who are next to the reserve – we think that they are poaching. They report it to the reserve manager."* (P363, 56:56). In some cases, reserve management seem to be aware of who the perpetrators are (P354, 186:186). It is important to note that removal of medicinal plants is also viewed as poaching and is serious both within the reserve and the surrounding area, since some collectors do this for commercial purposes and send the plants to Durban for sale (P362, 249:249). This latter type of poaching would need to occur on a large scale for it to be financially viable for the collectors.

Four quotes are provided by C2 participants which link to other environmental concerns, namely burning of the veld and sand mining.

***(f) Good relationships***

Finally, the quotes from C2 within the code 'R: Relationship is fair to good', testified to improved relations due to: the current reserve manager's interactions with the community (P2, 24:24); people from the community being hired (P2, 34:34); the forum being established to talk about how to look after the reserve (P363, 23:23); more environmental education initiatives (P364, 105:105); and fun sports tournaments between reserve employees and community members (P364, 124:124). It is interesting to note that no quotes for this code emerged from the C1 focus groups, while C2 provided seven.

***C. Summary: Relationship between community and protected area***

C1 participants are less positive about the relationship. They are dissatisfied with benefits. Far fewer references to poaching came from this constituency, but lack of awareness regarding what constitutes a poaching offence, and the danger of reporting offences, was mentioned. On a positive note, C1 acknowledge appreciation of the reserve and its resources. However, it appears that they are unaware of many of the community projects emanating due to the presence of the reserve, or they do not see these as benefits. C1 appear to want traditional large-scale development, in contrast to the low-impact unobtrusive approach sought by C2.

C2 are more positive about the relationship and testify to the existence of a good relationship. They mention several initiatives that are improving this relationship. C2 make more references to poaching and other environmental concerns. Poaching and appreciation of reserve/resources are mentioned by both constituencies.

Section 5.3.2 contributes towards answering Research Objective 3.

## 5.3.3 Positive and negative changes that protected area has brought to way of life

Table 5.7: Orientation to Question 3-2: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q3-2 Pos changes<br>Q3-2 Neg changes /<br>PC=Positive changes<br>NC=Negative changes | Y | | How has the reserve changed the way you live (positive and negative)? How have things changed? | FGI | Positive changes (Section 5.3.3.1)<br>Negative changes (Section 5.3.3.2) |
| | | Y | How do you think the reserve has changed the way the local community lives (positive and negative)? How have things changed? | II | |
| **Research Objective** | | | 4 | | |

### *5.3.3.1 Positive changes*

***A. Overview: Positive changes***

All data pertaining to positive changes mentioned by C1 and C2 for MNR/K are captured in Table 5.8.

For the C1 focus groups, nine quotes emerged. Out of the 15 codes in the coding frame, seven were used in coding the responses of the MNR/K focus groups. Although quote numbers are low, access to natural resources for the community surfaced as a positive change, together with acknowledgement that conservation of the environment is a positive aspect. Focus Group 2 was hardly responsive to this

question, with seven of the nine quotes coming from Focus Group 1. Again, the first focus group, comprising a few leaders, knew more about the positive changes that the reserve has brought than the younger group in the second focus session. This highlights the importance of the reserve ensuring people know about the positive changes brought about due to the presence of this conservation space.

Table 5.8: Code frequencies for 'Q3-2 Positive changes': MNR/K

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (PC=Positive Changes)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| PC: Access to natural resources | 2 | 0 | 2 | 6 |
| PC: Collaboration/contact | 1 | 0 | 1 | 1 |
| PC: Community projects | 0 | 0 | 0 | 4 |
| PC: Education/training | 0 | 0 | 0 | 4 |
| PC: Employment | 0 | 1 | 1 | 6 |
| PC: Environment is being conserved | 2 | 0 | 2 | 0 |
| PC: Facilities and infrastructure | 0 | 1 | 1 | 2 |
| PC: Other | 0 | 0 | 0 | 2 |
| PC: Personal enjoyment of reserve | 1 | 0 | 1 | 3 |
| PC: Revenue sharing | 0 | 0 | 0 | 1 |
| PC: Successful land claim | 1 | 0 | 1 | 0 |
| **TOTALS** | 7 | 2 | **9** | **29** |

The C2 interviews revealed 29 quotes, making use of nine of the codes. The overall perception of positive changes due to the reserve's presence is therefore much stronger among C2 participants. For C2, the codes of 'Employment' and 'Access to natural resources', had the most quotes followed by 'Community projects' together with 'Education and training'.

### *B. Specifics: Positive changes*

#### *(a) Access to natural resources*

In total, eight quotes fell under this code, (C1:2; C2:6). These quotes indicated that communities view access to natural resources as a positive gesture on the part of the reserve. However, it is concerning that C2 participants note this **more** than the C1 community members who have access to these positive aspects. Access to resources as a benefit also emerged strongly when data was gathered by NGT (see Section 5.3.7). C1 participants mentioned firewood [*"Another positive thing it's because people can still access [ the reserve for firewood]"* (P355, 254:254)] and sand for plastering (P355, 274:278). Regarding firewood, the community may not collect from the reserve itself (unless the reserve is removing exotics), but they may gather wood and sand in the TRACOR area.

C2 also mentioned firewood: *"… when we had the exotic gum trees, they were not paying for the*

*firewood, they were just getting it for mahala, for free ... they just come and cut. Anyone who has transport can come"* (P2, 49:51); and *"they collect firewood in the upper areas, TRACOR"* (P364:192:194). Thatching was mentioned by two C2 interview participants, and is a significant benefit for local people:

> *"And then you see, the thatching ... it's a big benefit but maybe people will deny that. Because for example, they used to get this thatch grass even around their villages. … but because of the land management in terms of your fires and whatever, they lost that. So that's why they can only get that now here at the reserve. Because it is still protected, it is still being managed properly. You can't even get it just outside the gate, and so those are the things [where] … people are still benefiting, because … if it was not a nature reserve .... that specie [would] be gone"* (P362, 231:231).

> *"... here we're protecting the environment, but there is that thatched grass which is [scarce] outside, because the veld there is always burnt. Here we open the grass harvesting in May ... and close end of August. So they come here and benefit straight out of the reserve from cutting the grass … it's only R20 to come and cut the whole grass, as much as you can …"* (P364:153:153).

The final positive aspects mentioned by C2 are that of access to graveyards and traditional rituals:

> *"... there [are only] a few graveyards that people ... still have. But they still have access to those. Because that one, we don't even debate ... the ... amagqirha[18] … we just allow them. They don't even need to pay to come and do their rituals. No, that one … we want to bring it back as it is ... [The amagqirha can come in] anytime. Anytime, even if … they will have some person to heal and have to come to the reserve [at] midnight. ... we will just try to arrange it because that time is the time that has been [determined], and we can't change that"* (P362:237:237).

***(b) Environment is being conserved***

Two participants from Focus Group 1 commented on the value of having an environment that is conserved. One female participant stated: *"Environmentally we are happy as the community because there are certain tree species which are being preserved … and remember they indicated earlier on that as much as the community can fetch wood there, but there are specific trees which you cannot cut. So in this way the generation will be able to see those specific species … preserved there. So that is a plus in terms of environmental issues. Same as animal species. There are those species which are there which kids they've never seen with their naked eyes but you can see your zebras and other animals. That is a plus because another thing … is that people in the villages they are not concerned about environmental issues. Like right now you can see it's more about employment. But it is also very important for us as the community to balance the two: as I've indicated that they are helping us [with firewood]; but there are trees which are protected and we are well aware of those trees that are protected for future generations …"* (P355,384:392).

A senior figure's response to the above-mentioned quote confirmed conservation of the environment as a positive move: *"It's ... very good, she's got a very good point, of which people, some of us, don't understand. We only want what's there".* The researcher responded *"Yes ... and to sort of try to understand both sides"*, to which this leader said *"Balance it, yes"* (P355, 403:405). The strong and

18. The amagqirha refer to Xhosa traditional healers.

articulate comment on environmental conservation above followed a heated debate related to Question 2-1, where locals were talking about dissatisfaction with benefits. Up until this point in the discussion, no one had mentioned any advantages of conserving the natural environment.

***(c) Personal enjoyment of reserve***

Apart from using reserve resources, four quotes emerged which demonstrated personal enjoyment of the reserve, for example a C1 participant mentioned enjoyment of the beaches (P355, 213:213). The other three quotes came from C2. One was about the beach: *"there is a beach there – for everybody, it's free to enter and go to the beach without any payment"* (P363, 33:33), while the other two were about the decreased gate levy for local people. On certain public holidays, entrance is free, while at other times, a decreased gate levy applies:

> *"And on the festive seasons – 25th, 26th and 1st of each year and during Easter, they don't pay gate entrance fee. They can just come for free"* (P2, 52:52).

> *"... with the gate levy ... It was R20 and then we decided to take it down to R10 per person for all those communities around the reserve. But if you come from Flagstaff, then we charge you R20"* (P2, 78:78).

***(d) Employment***

Employment deserves mention, as seven quotes were coded here (C1:1; C2:6). The C1 participant stated that the reserve does create jobs (P356:70:72). C2 quotes referred to jobs created through permanent employment, tenders, programmes or temporary contracts. The examples below have been selected to represent this range of different employment options provided by MNR:

> *"Yes – it improves their lives because when they got the piece jobs... There was a guy at Msikaba – he built his house from the little money he was getting from the reserve … He was supervising the general assistants – cutting the exotics"* (P2, 38:38).

> *"... the reserve had changed the community's lives because there are opportunities of jobs … There are sometimes special projects, which are attended by the communities ... They also get some tenders there"* (P363, 25:25).

> *"Because we have got job opportunities, I will say it is 95% … of the people are coming from these villages that are working permanently here at Mkhambathi. And then also with the smaller ... programmes like Working for Water, Working on Fire, where ... about 99% are coming from these villages … So those I would say are direct benefits"* (P362, 193:193).

> *"In the TRACOR land, SAPPI is running the area in connection with the Mkhambathi Land Trust. They are planting a forest there … gum trees for them to sell in the future and make money out of that. So there are people that they employ from the local communities, which are doing that – cutting the old trees and planting new trees"* (P364:196:196).

Once again, it is concerning that C2 were very aware of these positive changes, but not C1 to the same extent. Knowledge of these positive aspects could influence attitudes and behaviour towards the natural environment of the nature reserve.

***(e) Community projects and education and training***

Two further codes deserving mention are that 'Community projects' and 'Education and training' opportunities are positive changes. This was not, however, mentioned by C1, but by C2 (four quotes for each). It is evident that excellent initiatives exist, but the community members in this study did not mention them. Either they are unaware of these or do not view them as positive changes wrought by the reserve.

Under 'Community projects', assistance for local schools and sports programmes were mentioned by C2 as aspects that have changed local people's lives in the positive sense. Three quotes follow to illustrate this. Community projects were also mentioned in 'Q4-3 More positive' (regarding what makes communities more positive towards the reserve), but once more, only by C2 participants. This is discussed in Section 5.3.4.

> *"There is a school next to the reserve – it's Mkhambathi Primary School … We helped them … There was a guy who was going to take over the cottages, and we asked him to help them with the building materials. There was a classroom that they were fixing. So he helped them …"* (P2, 42:42).

> *"… there is some money paid to the Board of Trusts – they also help the schools around the reserves"* (P2, 47:47).

> *"First of all, from the [soccer] games that I've mentioned to you … the first prize people … get a kit [from MNR] for the soccer tournament and they get trophies and medals, they get exposure. They get knowledge ... knowledge of soccer and everything. So we're upgrading sport in a way, but through conservation"* (P364, 136:136).

The 'Education and training' code contained no quotes from C1, but four from C2. These were about fire awareness training (two quotes) and teacher training (two quotes) and are provided below respectively:

> *"The awarenesses that we do from the reserve to the schools, the awareness from field rangers, conservation, the awareness from firefighters, making them aware of the danger of fire. So they get that knowledge from the reserve"* (P364, 138:138).

> *"To get knowledge to the people of when do we start fire, when do you make fire burns for your home (because you have to make fire burns for your home). How do you control? … you cannot burn when maybe there's 30 degrees of sunlight and then there's wind … So that's when the firefighters make those awarenesses to the people so that they can make fire burns around their homes in a safe manner ..."* (P364, *176:176).*

> *"... the teachers, they got some training through the reserve, through People and Parks Programme"* (P364, 139:139).

> *"There was also another programme that was running, Wild Coast Programme, which was also a section of ECPTA, where ... two teachers from each school from the local villages [were chosen] ... they underwent environmental training, so as to be aware of any environmental issues"* (P364:141:141).

***(f) Facilities and infrastructure***

'Facilities and infrastructure' was mentioned by one C1 participant and two C2 participants. Two quotes acknowledged that the presence of the reserve has resulted in government attention to the area, for example a community member commented that *"I think it has improved the standard of living of people because the government have to maintain some other places so that it may look attractive"* (P356, 62:64); and a conservationist said that *"... we've got a nature reserve which people need to access. So in that way the people will be benefiting in terms of the improvement, in terms of the infrastructure"* (P362, 197:197). The third quote related more to infrastructural initiatives planned by the reserve: *"We had a land claim. Because there was this [situation where] people were deprived of [land and resources]. Now there was an issue of saying 'let's try and assist those communities, in terms of other projects, like your electricity, putting in of water …'"* (P362, 199:199).

***(g) Other***

The quotes below emanated from codes with a very low frequency but are mentioned because they help to build the picture of the aspects that influence attitudes and behaviour. 'Collaboration/contact' as a positive change emerged from C1 and C2. A C1 participant commented that *"I think we see that in a positive way, because we are now part of the board of directors that actually is entrusted to look at issues of Mkhambathi"* (P355, 350:350). This was echoed by a C2 participant: *"... the Board of Trust [members] for the reserve are from the community which is adjacent to the reserve. So the community understand more about the reserve and conservation ..."* (P363, 25:25).

'Revenue sharing' of 15% from accommodation, gate levies, sale of firewood, asset disposal, etc. was mentioned by C2, while the 'successful land claim' is mentioned by C1 [*"I think the issue that it was claimed back by the community, it's actually a positive sign because people got ... money out of it"* (P355, 319:319)]. Under the code 'PC: Other', the issue of fire surfaced again (but not in the context of training as was discussed above). These two comments were about support for the community when fires break out. The firefighters trained by the reserve can assist (P364, 173:173), as can the field rangers [*"When there is fire in the neighbouring communities, some of the field rangers go there and assist .... So they save lives, they save people's houses from burning …"* (P364, 138:138)].

***C. Summary: Positive changes***

Amongst C1, there was little talk regarding positive changes (nine quotes), but there is acknowledgement of access to natural resources, the value of conservation, collaboration, employment, facilities and infrastructure benefits, and personal enjoyment of the reserve. Community leaders were more aware of positive changes brought about due to the presence of the reserve, than were the younger participants.

Some of what C1 says was echoed by C2 with greater frequency and more detail (29 quotes). 'Access to natural resources' and 'Employment' emerged most frequently. C1 was either unaware of some of the positive changes mentioned above or did not see them as positive changes. Access to natural resources is mentioned by both constituencies as a positive change.

#### *5.3.3.2 Negative changes*

***A. Overview: Negative changes***

Section 5.3.3.1 dealt with the positive changes under Q3-2. This section covers the negative changes, with the data presented in Table 5.9.

Table 5.9: Code frequencies for 'Q3-2 Negative changes': MNR/K

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (NC=Negative Changes)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| NC: Frustration from lack of action | 1 | 0 | 1 | 1 |
| NC: General | 0 | 0 | 0 | 1 (N/A) |
| NC: Lack of access to natural resources | 0 | 0 | 0 | 5 |
| NC: Less jobs than before | 1 | 0 | 1 | 0 |
| NC: Reserve deteriorating | 2 | 0 | 2 | 0 |
| **TOTALS** | 4 | 0 | **4** | **7** |

For C1, Focus Group 2 (the younger, predominantly female group) reported no negative changes, while in Focus Group 1, no code had large numbers of quotes. 'Frustration from lack of action' and 'Less jobs than before' had one quote each while 'Reserve deteriorating' had two quotes. All four of these quotes, however, relate to disappointment with the reserve.

For C2, one quote emerged for the codes 'Frustration from lack of action' and 'General' respectively, while five quotes were coded under 'Lack of access to natural resources'.

The quote coded under general was a general comment, namely "*It's only few negatives I think*" (P363, 35:35). This comment cannot therefore be viewed as a specific negative change and has been marked as 'N/A' in the table above. It is applicable though, in the sense that it reflects the opinion that there are not many negative changes.

***B. Specifics: Negative changes***

***(a) Disappointment with reserve***

The C1 quotes under the codes 'Frustration from lack of action' (one quote), 'Less jobs than before' (one quote) and 'Reserve deteriorating' (two quotes) all relate to disappointment that the reserve is not as vibrant as in previous decades. An elderly participant who was very negative overall and remembered how the reserve was in 1979, stated: *"That time there was a lot of people employed"* (P355, 288:288). The chief, translating for the elderly man, went on to say *"As time goes by it started declining slowly. At the nineties there was [more] people being employed. Then it started fading. As till now … And at present he's not happy. As a matter of fact, it should be closed"* (P355,303:303). This was followed by the statement: *"And he is quite right. He is quite right [referring to previous participant's comments on deterioration]. You can see the condition of Mkhambathi. And I'm telling you, 20 years ago we used to visit there. We were young. Mkhambathi was booming with people flocking in and the road, it wasn't like this. It was worse than this, [now] the road is better, but there's no one coming in because of the conditions of Mkhambathi. Who can stay there? There's no network in Mkhambathi. You can't communicate"* (P355, 305:305). Although the lack of network may not be a problem for all tourists, the general deterioration of MNR needs to be acknowledged. The final quote here is: *"Yes. We are frustrated. We are really frustrated with Mkhambathi. Over 12 years there's nothing happening there … Now we don't even want that Board of Trust … because ... they're not performing"* (P355, 399:399).

Correlating C2's responses with those of C1 for the above-mentioned codes, there was only one quote under 'NC: Frustration from lack of action': *"Because the board doesn't employ all of them. So for those who are not employed, [they feel] as if there are people who ... belong to the reserve and [then] those who are neglected by the community members (which are the Board of Trust)"* (P363, 29:29). This quote also reflects some of the dissatisfaction with the Board of Trust. Since the board is a key link between the reserve and the people in the current co-management arrangement, it is regrettable that this distrust exists. This needs to be addressed going forward. The reserve management is aware of the issues surrounding the board and is attempting to get better reporting and transparency structures in place.

***(b) Lack of access to natural resources***

Five quotes were mentioned here, all from C2. The negative changes for the local community mentioned by C2 related to loss of land and grazing, fishing restrictions and lack of access to medicinal plants. Some of the quotes are below (in the above-mentioned order). These negative changes also emerge later in the NGT data gathering undertaken with C1 (Section 5.3.8 on 'Losses').

> *"Some of community they don't want the reserve, because they ... compare this reserve and the other side of [KwaZulu Natal] – they said, 'no, there's houses next to the sea and they can build shacks'. So this is what they want to do, but we tell them 'no, it's not allowed to come and do that'. And they also want their cattle to come and eat grass inside the reserve"* (P2, 59:59).

"*There is this issue of access in terms of when they want to come and fish. Out of the restrictions … you can fish in some places, not in other places, bag limits (which they didn't used to have) [which mean you can] only get five fish per day, of [a certain] specie*" (P340, 219:219).

*"... The nature reserve is preventing the harvesting of those type of medicines [by locals]. … people from local villages, they always say, 'no, we want those traditional medicines and plants inside and trees …, but the park is preventing us from that, but it's our land'. ... but the awareness is being done with them why we're preventing [this], but ... it's what ... local people are saying"* (P342, 187:187).

Loss of access to natural resources is significant. It is interesting that C1 did not mention these under this question. The above quotes are from C2, namely conservationists and those involved in managing tourism at the reserve. Loss of access, expressed by C1, does however emerge later under 'Q9-7 Losses'. Management does attempt to mitigate these negative changes by providing access to thatching grass. Firewood is also provided when available, for example, when exotics are removed.

***C. Summary: Negative changes***

The only issue emerging here for C1 is disappointment and distrust regarding both the Board of Trust and the deterioration of the reserve. Regarding the latter, the community is disillusioned by the lack of action and the fact that fewer people are employed than in the past.

C2 mention lack of access to natural resources, and comment that local people mind the fishing restrictions and losing access to plants; and that some would rather have the land.

In comparing positive changes to negative changes, both C1 and C2 mention more positives (C1:9; C2:29) than negatives (C1:4; C2:6). It is encouraging that more positive changes emerged from the data. The totals for C1 and C2 are also much closer for negative changes. One might have expected that C1 would have significantly more negatives. Further cross-question analysis is undertaken in Section 5.3.10.

Section 5.3.3 contributes towards answering Research Objective 4.

## 5.3.4 Increasing positive attitudes towards protected area

Table 5.10: Orientation to Question 4-3: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q4-3 / MP=More positive | Y | | Some people like this nature reserve and the animals. Some people think there are better ways to use this land. What would make you more positive towards the reserve being here over the next 100 years, that is, down to the time of your great-grandchildren? | FGI |
| | | Y | What do you think would make the local community more positive towards the nature reserve being conserved in the future? | II |
| **Research Objective** | | | 6 | |

### *A. Overview: Increasing positive attitudes towards protected area*

The results for this question are presented in Table 5.11. There were no significant differences between C1 Focus Group 1 and 2, except that Focus Group 1 made more references to employment as an aspect that would increase positivity towards MNR. Both C1 focus groups were vocal regarding 'Development/infrastructure' as a positivity builder (five quotes each), making this the code with the most C1 quotes. This was followed by 'Employment' (five) and 'Involvement/interaction' (two). Two further quotes emerged, one under 'Other' (relating to introducing the Big Five) and the other under 'Information/education'.

C2 also mentioned 'Employment' (four quotes), 'Information/education' (five) and 'Involvement/interaction' (five). Other codes emerging which did not feature with C1 were 'Community projects' (six), 'Enjoyment of reserve' (two), 'Pride in reserve' (one) and 'Training' (one).

Hence, in terms of increasing positivity, for C1, development and infrastructure dominate; while for C2, it is community projects. It is interesting that there are no mentions of the latter by C1 in Q4-3. Likewise, no C2 participants mentioned development and infrastructure as an aspect that can encourage community positivity towards MNR. The results therefore show rather differing perceptions between C1 and C2.

Table 5.11: Code frequencies for 'Q4-3 More positive': MNR/K

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (MP=More positive)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| MP: Community projects | 0 | 0 | 0 | 6 |
| MP: Development/infrastructure | 5 | 5 | 10 | 0 |
| MP: Employment | 4 | 1 | 5 | 4 |
| MP: Enjoyment of reserve | 0 | 0 | 0 | 2 |
| MP: Other | 0 | 1 | 1 | 0 |
| MP: Information/education | 0 | 1 | 1 | 5 |
| MP: Involvement/interaction | 0 | 2 | 2 | 5 |
| MP: Pride in reserve | 0 | 0 | 0 | 1 |
| MP: Training | 0 | 0 | 0 | 1 |
| **TOTALS** | 9 | 10 | **19** | **24** |

### *B. Specifics: Increasing positive attitudes towards protected area*

#### *(a) Development and infrastructure*

Ten quotes were coded under 'MP: Development/Infrastructure', five from each C1 focus group. All ten related to C1's desire for improved facilities for locals and tourists. There was recognition that improved facilities and more accommodation could result in more tourists, which brings more job opportunities. Specific mention was made of shops, more accommodation options, road access, better walking paths

within the reserve, more facilities for community benefit such as a clinic, and a cellular network. The following four quotes link to **infrastructure, accommodation and job opportunities.**

> *"We like to have that nature reserve. The only thing that must be improved is infrastructure [which] is very poor here … If there are more tourists, then us as young people will get more jobs. The only thing is infrastructure … because tourists struggle when they come here …"* (P355, 451:451).

> *"I think if the reserve or Eastern Cape Parks can try to get the investor who's going to make more repairs so that there can be more visitors, that would also create the opportunities of jobs to the communities surrounding the reserve. The backpackers – all that … Because now there are limited numbers of people who are employed there than before when the place was being operated by the private company"* (P355, 446:446).

> *"I think if we can have maybe more B&Bs, if the standard can be higher … because there are very few people that can book to spend time there, because there are very few infrastructures, very few rooms. So you have to book on time that you get a place"* (P356, 107:107).

> *"I think the other thing ... it is the road that goes there, it is so terrible. ... When we have a small car you think twice before [going] to Mkhambathi. ... At least it could be a tarred road, it would be much better ... Because sometimes people prefer to go to Margate, to Port St Johns, to Amzamba – because of the road infrastructure"* (P356, 157:162).

**The discrepancy between how the community would like to have the area developed and the low-impact approach that is being implemented by ECPTA and the investors**, also emerged here: *"Yes, before the government promised to make a small town there. So maybe the next generation would look after it better if the government could [do that]. … the visitors … go to Mkhambathi, but it's not well developed because the visitors need the development at Mkhambathi, the community need Mkhambathi to [provide work and development]"* (P355, 427:427). When the researcher asked whether the participant was referring to a small town for the sake of tourism, another participant replied *"No, no, no, complex, complex, shopping centres ... in Mkhambathi ... for local people ..."* (P355, 434:440). This same participant also stated: *"You see ... people here are poor and unemployed [but] we got land. The difference between us and Mkhambathi, there's friction between us. It's like we don't like each other, but we like each other. The views are different. We want what we want – … shops, … ATMs. … But Eastern Parks wants to keep the land unique because investors coming from overseas (and wherever they're coming from), they're tired of seeing buildings, shops, storeys and all that. They want to see a different thing. … So, that's why they're thinking the other way. They will keep that like that, [because] people from overseas like to see a unique land"* (P355, 447:447).

Once again, the desire to **see Mkhambathi revived**, emerged. One must remember that this was mentioned in the context of what would make the community more positive towards the reserve into the future: *"the standard of Mkhambathi is very low [compared to] previous years. Like there was a clinic there, a hospital there. Even the hotel rooms are of very poor standards"* (P356, 91:91). The data suggests that locals want a thriving reserve as well as have facilities that meet their needs, such as a clinic – and that these aspects would improve positivity.

***(b) Employment***

The next code used most was 'Employment' (C1:5; C2:4). Employment was touched on in the preceding section. Two quotes related both to infrastructure and employment, and so were coded with both 'MP: Employment' and 'MP: Infrastructure/development' (namely P355, 451:451 and P355, 446:446). Other quotes emerging from C1 are presented below. In a poor area with little other opportunity for employment, local people look to Mkhambathi as a solution.

> *"The community they need Mkhambathi to [provide work and development]"* (P355, 427:427).

> *"We want – because we are poor. We want to work in there. They must create work. So, there's very big difference between us and Mkhambathi. That's the main problem"* (P355, 447:447).

> *"... the number of employees is very, very low"* (P354, 91:91).

This desperation was also picked up on by two C2 participants:

> *"From what I've heard from the people, it's actually a cry of the nation … it's a lack of employment. So if the nature reserve can employ more people in a permanent basis … more than they do currently, because people want to be employed and want to be permanently employed ..., so I think [employment] will also raise the bar for the people to appreciate the nature reserve … I know that [jobs have been created], but mostly, ... they've been on [contract] ..."* (P364, 211:213).

> *"If there can be more opportunities of employment. Even if it's temporary, it's fine, because there are no factories here … it's only the reserve … There is no place to go and find the job near … If there are projects, even special projects, we can create a little employment, the people can be more positive"* (P363, 39:39).

It is acknowledged that with over 6000 households in the seven villages that form part of the MLT, only a tiny handful will be employed in a small reserve like MNR. Several employment creation initiatives are underway though, mostly headed by the reserve, and in some cases, in partnership with other organisations. These are discussed in the next section on 'Community projects'.

***(c) Community projects***

The six quotes under the code 'MP: Community projects' all came from C2, demonstrating that C2 participants feel that community projects will increase positivity amongst C1. 'Community projects' were also mentioned by C2 in Section 5.3.3.1 when they were considering positive changes that the reserve had brought. Here, however, different examples of projects are supplied.

Four of the six quotes referred to specific projects. There were two references to the Environmental Schools Competition:

> *"There's that schools competition that we run, that's number one, the winners of that … come and spend a night in Mkhambathi … when they are here, ... they get [theory], we give them presentations on what is marine and what is terrestrial. The following day [they] take a mini-tour around Mkhambathi, view all the waterfalls, ... caves, ... vulture colony, the beach, come back ... get more knowledge, and [have question time] afterwards. That's what we do for the locals" (P364, 265:265).*

> *"That competition, it made a big change. Because now the local people also want to do conservation. Before they were not concerned about conservation – they were just seeing conservation as that we don't want them to come and take things from inside the reserve. Now they see [MNR] as a benefit to them" (P2, 127:131).*

The other specific projects mentioned were the Fire Protection Association, which works with the community on fire awareness and safe burning practices (P362, 249:249) and plans for a nursery for indigenous plants combined with a cultural centre: *"... there were plans before for ... a [nursery] where you grow indigenous plants of that area. … And then for people to know those traditional things of Pondoland ... know my roots or know my plants or know my culture. I can go there and get a full history of the culture of Pondo people. So, projects like that will also uplift people so that ... people of the local communities [will] know about these things ... So I think projects like that will also make people proud of Mkhambathi … they will know that [their culture] is kept there and … won't die with [the older generation]"* (P364, 235:235).

The projects mentioned move beyond tangible benefits to the intangibles – learning about conservation and one's culture. It would appear that it is important to convince communities that these intangibles are valuable and add quality to life. The sincerity in the quotes from conservationists and those involved in managing tourism, show genuine concern for the local people surrounding MNR. The final two quotes are more philosophical but noteworthy in their attempts to achieve a win-win scenario for people and conservation. They refer to a dream of seeing conservation extending beyond the park, while local people benefit tangibly:

> *"The nature reserve to us is just a sample of how we would like to see this area looking – which is difficult now for people to understand. It will take time. The issue is about benefits, because if something is not benefiting people, that's [a] problem. That's why we … as management of the reserve … [want to assist people] to have ... other projects. … [So] whilst … [assisting] in this one and that one, people will … really look at us as people that are trying to assist them"* (P362, 273:273).

> *"And secondly, we want to change their mindset in terms of looking at things. ... because [when] we talk about poaching, people will say 'no, that's the way that we [do things]', but they don't think about any other alternatives in terms of their livelihoods. ... [for example] using [the] beautiful areas … waterfalls … nice scenery [that are] within those communities. … we would like to have some projects like small camp sites … managed by communities in the villages ... So that at least they can protect their [environment], because all this harvesting of forests … would stop because they could see some benefits coming [and realise] the importance of conservation"* (P362, 275:275).

The quote from a C2 participant under the code 'MP: Training' also speaks to the above: *"The other project … is if they can get more training. Tourism – they can get training on tourism so that there can be backpackers, ... [tourists] can travel to more places, … walking with the community. That can make [community members] positive too"* (P363, 41:41).

***(d) Involvement and interaction***

Seven quotes referred to involvement/interaction as an aspect that would encourage positivity towards the reserve (C1:2; C2:5). Six out of the seven quotations were about the Mkhambathi Board of Trustees. As mentioned in Section 5.2.3, the board consists of two members from each of the seven villages. They are responsible for reporting back to the community regarding the co-management of the reserve, and the determination of how the 15% revenue share accruing to the community should be spent. It would appear that their role of reporting back to the community is ineffective. The two C1 quotes were about this and echoed by four of the C2 quotes. Dissatisfaction with the board also surfaced in Section 5.3.3.2. A C1 participant from Focus Group 2 stated that *"I think that ... the community should be more involved in everything that is happening in the nature reserve. ... I don't think the board that is employed or that is dealing with the Mkhambathi thing, is transparent to the community. So, I think if the board can be transparent with everything to the community it could be much better"* (P356, 88:88). Four C2 quotations from three participants concur, for example:

> *"I think the reserve is doing a lot of things for them. But now the people that's not doing well – it's that board. Because sometimes they don't report what we are doing here. So, the people become angry ..."* (P2, 86:86)

> *"I think also with this question, if the Board of Trustees, whom are fully involved in reserve activities can bring their report back to the community … this will make the community understand more. Because sometimes the Board of Trust doesn't report to the community and this results [in] conflict between the reserve and the community, because they don't have a good idea what's going on there. They are sometimes hiding the reality of the reserve, just telling them … lies …"* (P363, 47:47).

Finally, under this code, a quote from C2 mentioned the following as a positivity builder – capacity building and skills transfer as co-management of the reserve occurs: *"This partnership that we have with the communities, whilst we manage together there is also ... a skills transfer … (in terms of how to manage your areas). [The board are] there as representatives of the communities to make sure that the communities are not robbed [and] get what they are supposed to get. But in the process they will also be getting [an] understanding of why we are doing this, why it is important and how they can also have input … [Because], within the core management [agreement], there is the issue of capacity building – in terms of leadership, management. So, there will be some opportunities that are coming in there. That's why I'm saying [that] this partnership, on its own, will have a positive impact"* (P362, 281:281).

***(e) Information and education***

Six quotes emerged here (C1:1; C2:5). The C1 participant stated a desire for community awareness training in the importance of the nature reserve: *"... I think community awareness about how important it is to have the nature reserve. So that the community will understand the impact that the nature reserve could have in our community. ... I think the youngsters could be also trained on something … to do with the nature reserve so that they could understand more"* (P356, 81:81). C2 referred to some of the initiatives already in place in this regard that they feel enhance positivity, for example the Environmental Schools Competition (mentioned under 'Community projects') and the fact that schools bring grades of

school children in for school outings. When the researcher asked what was taught to the children, the reply was: *"... [the teachers] tell us what they want – maybe they want to be informed about what's happening in the marine [environment] … and we prepare our field rangers"* (P2, 123:123). Another example follows, which involves both schools and wider community education about the environment:

*"... we have also embarked [on] extensive environmental education. ... we [are] trying to get people to understand ... the value of having a nature reserve, and the positives … that can also benefit them in the villages if they practise what we do here. So [with] that extensive programme … we have also mobilised the Department of Education ... And they've put it into their curriculum. And also we have programmes that we as Eastern Cape Parks do together with SANBI, WESSA[19], Department of Education, the Provincial Department, your Fisheries Department, Forestry, altogether we run this programme. Especially in this area. And I'm telling you ..., the way that it has been taken over by the ... learners! Because we tried to have topics …, like for example … the challenge of fires, illegal fires. I will give you the topic and we talk about the topic. And when doing our environmental education, even [at] these imbizos[20], we also present these issues to them"* (P362, 245:245).

Reference was also made to environmental education induction programmes for grass cutters (when community members come in to cut grass for thatching) and for those doing piece jobs within the reserve (P2, 131:131).

### *C. Summary: Increasing positive attitudes towards protected area*

C1 acknowledge that development and infrastructure is vital for both the local community and tourists and will result in employment. C1 are desperate for employment. They are not seeing community projects as something that increases their positivity towards the reserve. Together with C2, it was clear that the Mkhambathi Board of Trust needs to interact with the local community and increase transparency in order to raise positivity towards MNR.

C2 also recognise the need for employment. There is a genuine desire from C2 to see local people benefit tangibly and intangibly from community projects. C2 understand the importance of information/education, skills training and capacity building to C1's positivity, and have several initiatives in place.

The codes which C1 and C2 had in common were 'Involvement/interaction' and 'Employment'. While the majority of factors emerging here were tangible benefits, the intangible of 'Involvement/interaction'

19. SANBI is the South African National Biodiversity Institute, and WESSA the Wildlife and Environment Society of South Africa.
20. An 'imbizo' is a gathering of the community to discuss certain matters.

also emerges as important, largely in the context of the board not reporting back to the people and not keeping them informed and involved.

Section 5.3.4 contributes towards answering Research Objective 6.

### 5.3.5 Others' views on protected area

Table 5.12: Orientation to Question 5: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q5 / OV=Others' views | Y | N | What do your friends and family think about this reserve? | FGI |
| **Research Objective** | | | 3 | |

#### *A. Overview: Others' views on protected area*

This question was not put to C2 because it aimed to gain a wider understanding of community views regarding the reserve, heard from the community themselves. The data are shown in Table 5.13.

Table 5.13: Code frequencies for 'Q5 Others' views': MNR/K

| **CODE (OV=Others' Views)** (Neg=Negative) (Pos=Positive) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
|---|---|---|---|
| OV: Neg: General | 1 | 1 | 2 |
| OV: Neg: Want information | 0 | 3 | 3 |
| ***TOTALS FOR NEG:*** | ***1*** | ***4*** | ***5*** |
| OV: Pos: But want development | 1 | 0 | 1 |
| OV: Pos: General | 0 | 1 | 1 |
| ***TOTALS FOR POS:*** | ***1*** | ***1*** | ***2*** |
| **TOTALS** | 2 | 5 | **7** |

Few views were generated in answer to this question. Both focus groups only have one positive quote each. Although Focus Group 2 has more negative quotes, the sole negative quote from Focus Group 1 says that others feel the same. It should be kept in mind that Focus Group 1 were very negative overall, and one cannot therefore conclude that Focus Group 2 were more negative than Focus Group 1. This data should be viewed holistically, with focus on the content of the quotes rather than the numbers. The results for Focus Groups 1 and 2 will now be examined together.

Four of the 13 codes developed for this question (across all three case studies) were used to code the responses of the MNR/K C1 participants, generating seven quotes in total. The codes 'Neg' and 'Pos'

relate to **general** statements about being negative or positive. The other codes reflect a negative attitude about a specific aspect (for example we are negative **because** we want information, i.e. we lack this at present) or a positive attitude (for example, we are positive **because** we get employment or we are positive **but** want to learn).

Code frequency is low, but three codes emerged regarding participants being negative because they want information. Two quotes were general statements about being negative, while the other two belonged to the codes 'Pos: But want development' and 'Pos: General' respectively.

### *B. Specifics: Others' views on protected area*

#### *(a) General positive and negative statements*

Focus Group 1 reported that the views of others were the same as theirs (P355, 463:463). Since this group was largely negative, perhaps they feel others are also negative regarding the reserve. The quote from Focus Group 2 showed ambivalence: *"They are positive – some of them, they are negative – some of them"* (P356, 124:124).

#### *(b) Negative because lacking information*

These three quotes mentioned that people are negative because they lack information, for example: *"I can say the most is negative because of lack of information …"* (P356, 127:127). One of the quotes touched again on the lack of transparency of the board and how this impacts attitudes towards the reserve. The quote was given in Xhosa and translated: *"He is saying, some of them are not okay about Mkhambathi because they are [not] getting information, which has been hidden by the Mkhambathi Land Trust Board, so they don't know what's going on in their reserve. There are those who understand what's going on there, but there are those who don't understand what's going on there"* (P356, 124:124).

#### *(c) Frustration due to lack of development and the resulting employment*

The desire for development emerged in the previous question and again in the single quote emerging under this code. Here, it is encapsulated in the following discussion, which also touches on disappointment regarding lack of employment opportunities:

> ***Participant**: "Yes, I think it's a sort of frustration because people were expecting employment opportunities which didn't come. As a result, like he is saying, maybe people will prefer that you don't develop [referring to previous comment regarding the low-impact type of development chosen for Mkhambathi]. But the ultimate goal, people want to have Mkhambathi developed so that they can get employment opportunities. I think that's a big thing".*
> ***Researcher**: "So would you say ultimately the general view of the community is that it's good to have this area that's looked after?"*
> ***Participant**: "Yes".*
> ***Researcher**: "But you'd all like a bigger part in it?"*
> ***Participant**: "Yes, yes, and then be more developed"* (P355, 371:381).

It is difficult to know whether to label this as a negative or positive view. The first paragraph is negative, showing frustration with expectations not being met in terms of development and the employment opportunities which would result from it. It could be that the researcher prompted the positive reply regarding them wanting this conservation area. Due to this uncertainty, the researcher will conclude that this is a statement expressing the view of frustration.

***C. Summary: Others' views on protected area***

This question was only put to C1. In general, some responses are positive, and some are negative. Overall, more negative quotes emerged. On to specifics, C1 participants are negative mostly because they lack information. They are also frustrated due to lack of development and low employment rates. No new information thus emerged, but the answers did confirm findings from previous questions.

Section 5.3.5, together with Section 5.3.2, contributes towards answering Research Objective 3.

## 5.3.6 Responsibilities towards protected area

Table 5.14: Orientation to Question 7-5: MNR/K

| **Question ID / Code prefix** | **To C1** | **To C2** | | **Method** |
|---|---|---|---|---|
| Q7-5 / RP=Responsibilities | Y | | Do you have any responsibilities for this reserve? If you do, how do you feel about these? | FGI |
| | | Y | Do the local community have any responsibilities for/towards this reserve? If they do, how do you think they feel about these? | II |
| **Research Objective** | | | 5 | |

***A. Overview: Responsibilities towards protected area***

Table 5.15 outlines the data collected for this question from C1 and C2 participants.

Table 5.15: Code frequencies for 'Q7-5 Responsibilities': MNR/K

| | | | **C1** | **C2** |
|---|---|---|---|---|
| **CODE (RP=Responsibilities)** (LC=Local Community) | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| RP: Actions to encourage protection | 0 | 0 | 0 | 4 |
| RP: Ideas from LC to encourage protection | 1 | 3 | 4 | 0 |
| RP: LC afraid to report | 0 | 1 | 1 | 0 |
| RP: LC protect reserve | 0 | 0 | 0 | 6 |
| RP: LC protected reserve in the past | 2 | 0 | 2 | 0 |
| RP: Who to report to | 0 | 0 | 0 | 1 |
| **TOTALS** | 3 | 4 | **7** | **11** |

C2 contributed more to this question than C1. 'LC protect reserve' emerges with the highest frequency of quotes (six). These quotes referred to examples of where local people take action to protect the reserve. All six quotes came from C2 participants which suggests that they are well aware of actions taken by individuals from the community to assist conservation. Perhaps the average community member, however, is not aware.

Next, with an equal frequency of four quotes each, were 'Actions to encourage protection' (actions initiated by the reserve) and 'Ideas from LC to encourage protection' (ideas emanating from the local community to increase protection of MNR). The former referred to specific actions taken by the reserve which, according to C2 interviewees, encourage local people to protect the environment. The latter were suggestions from C1 participants themselves on how a conservation ethos can be promoted amongst the local community.

Two references were made to current conditions which have caused some community members to feel they are no longer able to play a part in protecting the reserve ('LC used to protect reserve in the past'). The last two quotes refer to 'Who to report to' should anything strange be seen and the fear of retribution if poaching is reported ('LC afraid to report').

### *B. Specifics: Responsibilities towards protected area*

#### *(a) Local community protect the reserve*

Six mentions of protective actions by local people emerged here, all of them from C2. Five of these quotes related to community people who report problems to the reserve, for example a fire or poaching activity. The first two quotes below are noteworthy as they touch on why these two C2 participants think the community participants have chosen to help protect the reserve – and it relates to **relationships** that were built on during a previous project, the Wild Coast Project. **Capacity** was built in individuals, a relationship resulted, and now, even though they no longer benefit financially from the project, these individuals see themselves as protectors, and have an ethic of care for the reserve. This has resulted in direct positive behavioural actions on the part of community members such as reporting fires and reporting poachers.

> *"From the past two years or so, we've seen people that will take responsibility like that. Through the Wild Coast Project that was here for about five years but ended ... The project employed field rangers from Msikaba, Lambase area, ... Amadiba …, Khanyayo and other villages. They were employed on a contractual basis, and we worked with them and got that relationship. Up to now, the responsibility that they take, when maybe they see fires … they give us a call and say, 'there's fire inside the reserve'. So, they keep us alert, and if we see smoke, we contact them and say 'is there any fire? Is it inside? How big is it?' And then we go there prepared. So, we've got that communication there"* (P364:274:274).

> *"Most of them they do care, but there are a few of them … saying, 'no, it's for them, not for us'. Most community members understand, since the Wild Coast Project has tried to involve them more in the reserve. … there was funding, they were getting tenders, … getting trained, schoolchildren were*

*having the schools competition and slept over in the reserve [and took] a tour inside the reserve. … Even the … young people now, are understanding what's going on in the reserve" (*P363, 66:66).

The first quote above mentioned the Amadiba, who live over the Mtentu River. What is interesting is that this community, together with the community living across the other boundary river (the Msikaba River), are not part of the seven villages forming the MLT. This is discussed in the following conversation, and again confirms that relationships and **knowing what goes on within the reserve** can play a role, even without direct financial benefits.

***Researcher**: "Any other responsibilities …?"*
***Participant**: "Yes we also got informers at Amadiba. We've got people that report to us. When there's a fire … we phone them and they tell us where's the fire ... Even when the poachers are getting in, the [informers] phone [the reserve manager] and say, 'hey, there are poachers … tell your guys to go and watch them'".*
***Researcher**: "And you don't find them telling you 'no – but we're now not part of this thing, so we don't want to tell you'?"*
***Participant**: "No, most of them – they tell us. Even the chiefs … they were warning the people and telling them they mustn't come and make trouble with the reserve because the reserve belongs to them".*
***Researcher**: "So, the chief of these communities is still on your side even though they don't form part of this?"*
***Participant**: "Yes, because they are part of the forum. They come to the meetings, so they know everything that happens inside the reserve"* (P2, 135:140).

The final three quotes related to **reporting** practices, for example:

*"... in some of these areas, we get reports that are coming from these guys, these villages, saying 'there is a problem, there are people that are planning to come and poach'. Or else even if we have got one [animal] which has just come out from the reserve and it has been seen, we usually get reports from the people – there is one of your game around here"* (P362, 283:283).

Although the quotes come from C2, they suggest that capacity building, relationships and sharing of information/involvement can foster an ethic of care and actual positive behavioural actions on the part of community members.

***(b) Local community used to protect the reserve***

In light of the above discussion, it is important to note that the following perspective from C1 indicates that some protectors have 'fallen away', as evidenced by the following two quotes. It appears that this is due to restrictions. In contrast to the sentiments above, which echoed inclusion, these result in local people **feeling excluded**. The quotes came from Focus Group 1, which consisted of several community leaders:

*"He's saying [that] before they were going to help with veld fires. They were also going to chase the poachers, but now, because there are those terms and conditions of Mhkambathi, they are unable to do that ... So basically the community feel excluded …"* (P355, 555:560).

*"The part that is most accessible is the TRACOR site. So in [TRACOR land], they used to have responsibilities, including ... veld fires, poachers and all that stuff"* (P355, 565:565).

***(c) Actions and ideas to encourage protection of reserve***

Four quotes from C2 were coded under 'Actions to encourage protection', while four quotes from C1 were coded under 'Ideas from LC to encourage protection'.

Starting with **actions taken by the reserve** to encourage protection, two of the quotes related to the Wild Coast Project. The first quote below alludes to the Wild Coast Project, while the second deals with other initiatives. This information supports the discussion under 'Local community protect the reserve', that **training/capacity building and/or involvement appear to encourage protection of the reserve by local people.**

> *"We said we will train … people from the local communities, ... including Amadiba, … Mdengane, [and] here. We had some people that we trained as field rangers and then we said we are not training them to employ, because we don't want to make any promises, but … if there are vacant positions, we will consider [them]. At the same time we [asked] those people … [to] be our eyes and ears ... in terms of looking after this reserve, because this is their resource."* (P362, 283:283).

> *"Yes, because, there's this problem that we have fires outside the reserve. Sometimes they burn the grass outside … and fire comes inside. So, we go to the chiefs and tell them that they must tell the people [to] stop making fires. We also help them with the team we have here – that Working on Fire Team. When there's a fire at the village next to the reserve, we go and help them, and they also go and educate the firefighters and students in the schools around them"* (P2, 134:134).

The next section considers the **ideas proposed by the local community** to encourage protection. Three of the quotes related to the suggestion by a young female that a clean-up campaign be organised to involve local people. This was in Focus Group 2, consisting mostly of young ladies: *"I think the community should participate by cleaning without expecting any money, just to clean there"* (P356, 200:200). Building on this, another participant added: *"Which is where they can organise a cleaning up campaign whereby we are going to clean the cardboard, the papers, the metals"* (P356, 204:204). Finally, another participant said that by doing this, it could encourage a sense of involvement: *"Yes, and … by that, they could know that they feel wanted, they can feel that they are involved"* (P356, 208:208). What stands out here is that a simple suggestion of goodwill towards MNR that the community would be willing to do free of charge, could encourage a feeling of involvement. It thus appears that **simple, easy to implement projects could positively impact attitudes. A sense of involvement seems to be an important intangible** emerging.

The final idea came from Focus Group 1 and followed the comments from two men relating to no longer having responsibility towards MNR:

> *"But I think ... [ones actions and sense of responsibility] depend on how well the community are clued up with environmental issues. Because me personally, as an environmentalist, whenever I see something happening along Mkhambathi I become very worried … So I believe [it's the] same with the community – it will depend on their background and the way they understand it. If the parks board [could] make the community aware … of what are the environmental issues there, then they will report.* ***How can you report something that you don't even know what the impact of that***

***activity is?*** *So, I believe that once they instill that into the community[then] they will see the positive part of things – where the people will … report poachers, report people who are collecting firewood illegally. If the community are not aware that that is wrong, they won't report"* (P355, 572:572).

This is a powerful comment, highlighting the importance of **environmental education to help local people understand their role and impact on the reserve.**

***(d) Reporting and fear of retribution***

The quote on reporting poaching or fires came from a C2 participant, who commented that people **know who to report to** and use the reserve manager's number. People sometimes also call her, and she then calls the reserve (P363, 57:62). The other quote, coded under 'Afraid to report', indicates the other side, where some individuals **fear retribution** if they report (P356, 186:186).

***C. Summary: Responsibilities towards protected area***

Emerging from C2, capacity building/training can help to build relationships that evoke protective behavioural actions (reporting escaped animals, fires and poachers), even after the tangible benefits have ended. As an example, it appears that the Wild Coast Project had a significant impact in this regard. By involving and skilling local people, it increased their understanding of the reserve. The Schools Competition also appears to play a major role in increasing understanding of the importance of MNR. Sharing of information, environmental education initiatives, involvement and knowing what is going on has been seen to evoke positive behavioural actions towards the reserve environment.

On the other hand, from C1 – not being able to feel involved causes a sense of exclusion which can impact attitudes. The data suggests that C1 is not averse to having responsibility, and that the individuals who have been involved in the past do assist in protecting the reserve. Sometimes a simple project such as a clean-up campaign by the community can help people to feel involved. Environmental education emerged as being important.

To return to the rationale for this question, it appears that tangible benefits (for example, training) and intangible benefits (for example, sharing of information/knowing what is going on) do influence behaviour and attitudes and can result in pro-conservation behaviour.

Section 5.3.6 contributes towards answering Research Objective 5.

## 5.3.7 Benefits due to having protected area near your home

The tools used for 'Q8-6 Benefits' and 'Q9-7 Losses' were different from the previous questions because they involved the use of NGT, where C1 participants generated notes; while the same questions were put to C2 in the form of individual interviews (as per the previous questions) (refer to Appendix E for

Table 5.16: Orientation to Question 8-6: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q8-6 / B=Benefits | Y | | What are the benefits of having this reserve near to your home? Which of those benefits are most important to you, which are least important? | NGT |
| | | Y | What are the benefits to the local community of living near this reserve? Which of those benefits do you think are most important to them? Which are the least important? | II |
| **Research Objective** | | | 4 | |

details). For the NGT, Focus Group 1 and 2 joined together. Each note was captured as a separate document and coded within that document in Atlas.ti. Ninety-five documents were produced from the 95 notes generated at Mkhambathi, with 52 of these relating to 'Q8-6 Benefits' and 43 relating to 'Q9-7 Losses'.

The questions on benefits and losses have three sections each, namely the **category**, the **category place**, and then the **specific benefits and losses** (Sections 5.3.7.1 to 5.3.7.3 respectively for benefits; and Sections 5.3.8.1 to 5.3.8.3 respectively for losses).

### *A. Overview: Benefits due to having protected area near your home*

The benefit categories were initially determined by the participants. When the researcher developed the coding system for this question, she coded the benefit categories to a finer level of detail. Both are discussed below.

Regarding the category place (ranking), the top three benefits, as determined by C1's ranking were visiting the beach, collecting thatch grass and employment opportunities (in that order). The ranking from the C2 interviewees differs slightly amongst themselves and in comparison to C1. However, for both C1 and C2 participants, the first three choices all relate to resource access (thatch grass, fishing and visiting the beach), followed by employment/training.

Moving away from the ranking to specific quotes, C1 mentioned more benefits than C2, with C1 highlighting 17 types of benefits, and C2, 14. In total, C1 produced 50 notes (i.e. quotes) containing benefits, while C2 had 33 references in total to benefits (quotes from the interviews). In terms of counts, C1 produced 12 quotes each for the beach and thatch grass, followed by employment (7). For C2, employment had eight quotes, followed by thatch grass (4) and then learning/training about environmental awareness/education (3) and access to other natural resources (3).

Based on ranking as decided by C1 and C2, and counts, controlled access to natural resources, employment and training appear to be vital benefits for those living around Mkhambathi.

#### *5.3.7.1 Benefit category*

All the benefits that C1 participants generated (each one written on an individual note) were pasted onto a large flip chart page by participants, who then categorised them accordingly. That is, all notes relating to collecting thatching grass (grass cutting) were put in one column, all those relating to job opportunities in another column, and so on. The researcher asked the participants to name each category, and this is what the 'Benefit Category' codes refer to.

When the researcher coded the data, she attempted to code to a finer degree, and thus changed some category names. However, the original category as awarded by C1 participants was captured in its own code set in Atlas.ti with the prefix 'B Cat', for example 'B Cat: Enjoying reserve'. These are depicted in Figure 5.5. The blue numbers in Figure 5.5 refer to the category placing, which is discussed below (Section 5.3.7.2). All the categories named by C1 still exist within the researcher's categories (Figure 5.6), but with a different structure. For example, C1 listed each resource benefit, such as collecting firewood, as a separate category, whereas in the researcher's version, these are all grouped under 'Access to natural resources'. The only category missing from the researcher's version is that of 'Benefit from other attractions'. This has been incorporated under 'Visiting Reserve'. These categories take into account the data from C1 **and** C2 and constitute the coding frame for this question.

Two quotations emphasised the opinion that no benefits are received, hence this is a category heading in both Figure 5.5 and 5.6:

> *"Mkhambathi does not really benefit the community of Khanyayo as we do not know who owns it"* (P265, 10:10).
> *"We do not get any benefit"* (P287, 10:10).

As explained in Appendix E, this data was explored via network views in Atlas.ti, to produce Figures 5.5 and 5.6.

#### *5.3.7.2 Benefit category place*

After participants had determined categories, the notes in each category were counted, giving an importance weighting to each category, as indicated by the blue numbers in Figure 5.5. For example, 'Collecting thatch grass' (which had 12 notes) was place second above 'Employment opportunities' (which had seven notes and was placed third). However, before accepting collection of thatch as the most important benefit to C1, the researcher asked the group if this was indeed the case for each category and its placing. The group was then given the opportunity to vote on their order of preference (i.e. now ranking the categories). In the case of benefits, for example, 12 notes were generated for collecting thatch and 12 for using the beach. However, when voting, C1 participants placed visiting the beach first, earning it Category Place 1. The benefit category placing/ranking by C1 as per their vote is

shown in Table 5.17. In this case, the order following ranking remained the same as in Figure 5.5. The results for losses are discussed in Section 5.3.8.

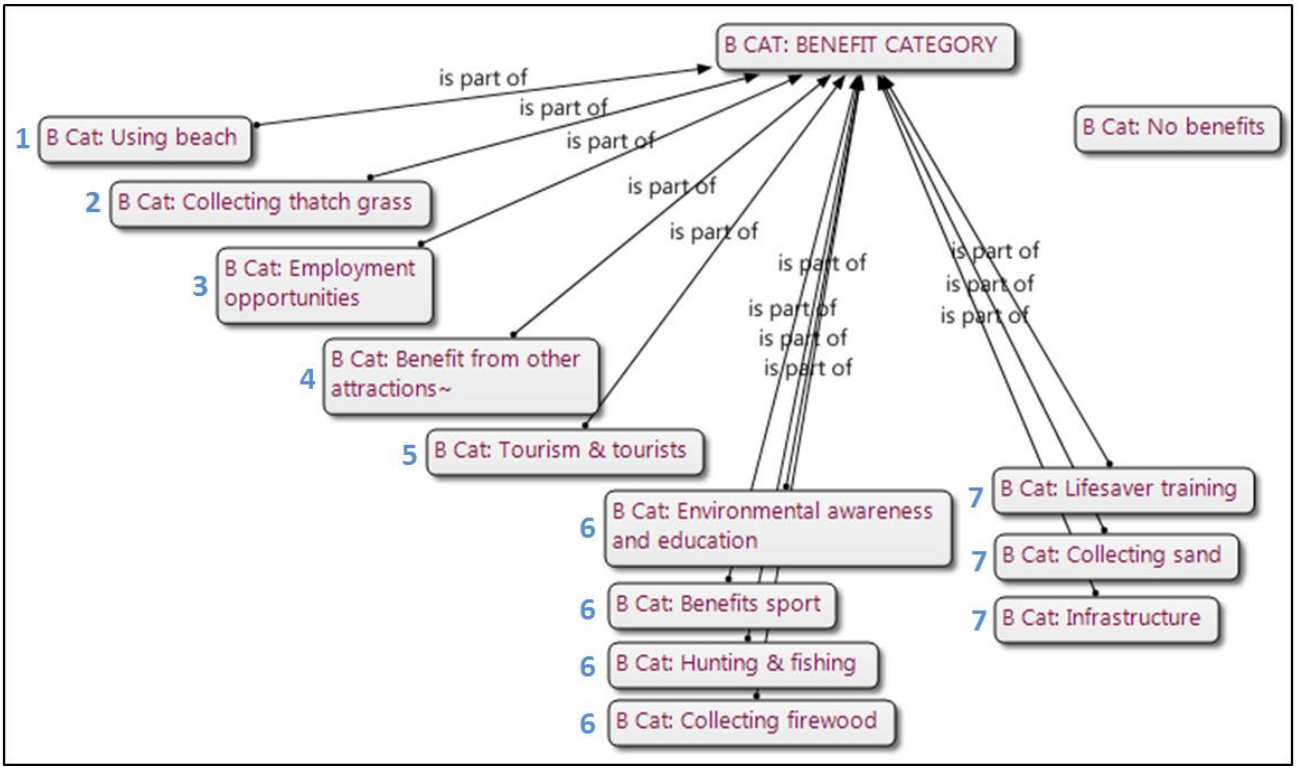



Figure 5.5: MNR/K benefit categories as determined by C1 participants according to number of notes

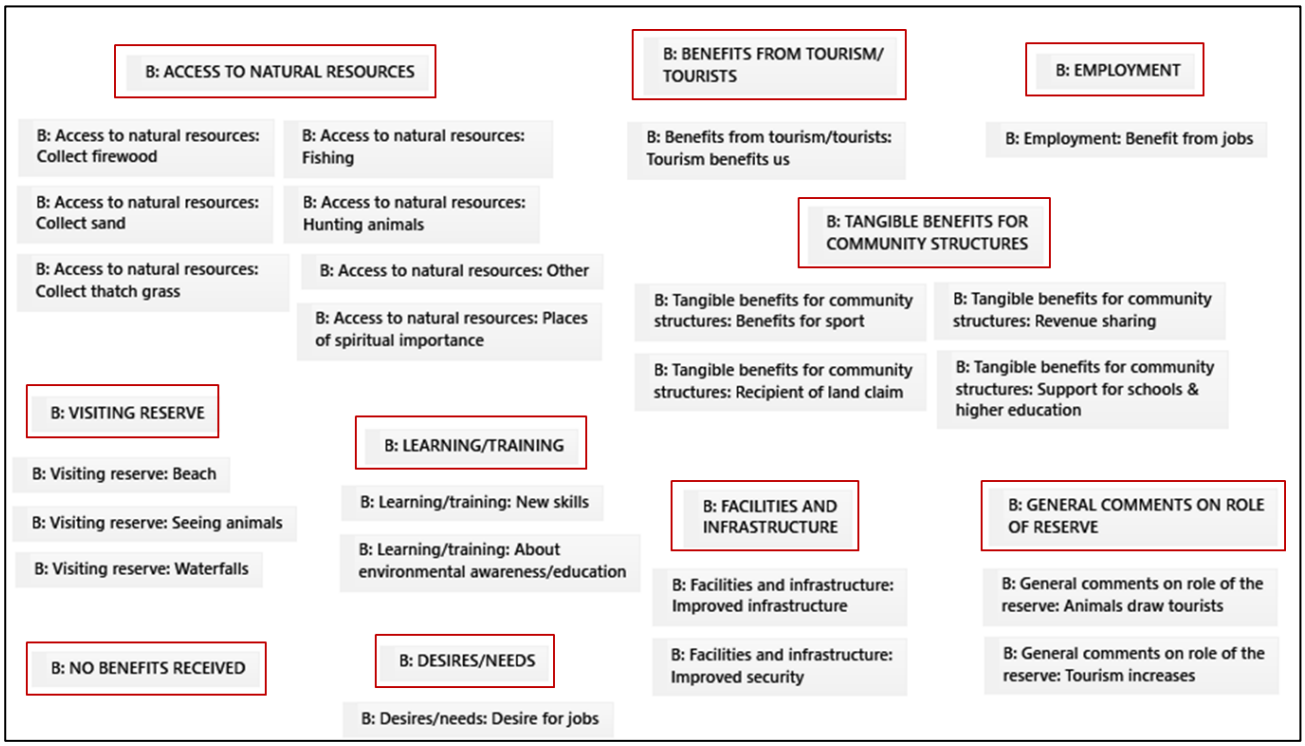



Figure 5.6: MNR/K benefit categories as determined by researcher during coding

The five C2 interviewees were not asked about categories, since they were not producing notes as a group that then needed to be ordered. C2 were asked in the interview to name the benefits and losses which they thought impact the community, and then to attempt to rank them in importance. To capture individual C2 opinions on benefit ranking, each individual interview has its own column in Table 5.17. Keep in mind that one interview had two participants (it was their preference to be interviewed together); and that some C2 participants did not feel they could rank the benefits. In these cases the cells are left blank.

Table 5.17: MNR/K benefit category placing: C1 compared to C2

| CATEGORY PLACE (According to C1 vote) | C1 NOMINAL GROUPING TECHNIQUE | C2 INTERVIEW 1 | C2 INTERVIEW 2 | C2 INTERVIEW 3 PARTICIPANT 1 | C2 INTERVIEW 3 PARTICIPANT 2 | C2 INTERVIEW 4 |
|---|---|---|---|---|---|---|
| **1** | Using beach (12) | | 1.Training & development | 1. Grass cutting | 1. Fishing | 1. Grass cutting |
| **2** | Collecting thatch grass (12) | | 2. Job opportunities | | | 2. Piece jobs |
| **3** | Employment opportunities (7) | | 3. Grass cutting | | | 3. Visiting beach |
| **4** | Benefit from other attractions (4) | | 4. Meat from culling | | | |
| **5** | Tourism & tourists (4) | | 5. Visiting beach | | | |
| **6** | Benefits sport (2) | | | | | |
| **6** | Environmental awareness & education (2) | | | | | |
| **6** | Hunting & fishing (2) | | | | | |
| **6** | Collecting firewood (2) | | | | | |
| **7** | Collecting sand (1) | | | | | |
| **7** | Lifesaver training (1) | | | | | |
| **7** | Infrastructure (1) | | | | | |

* Number in brackets is the number of notes produced by C1 participants. They total 50 – The discrepancy with the total of Table 5.18 is due to the two notes for 'No benefits' not being included above.
* Where C2 interviewees felt it was not possible to rank, cells are left blank.

For C1 participants, the top three benefit categories decided by the group were visiting the beach, collecting thatch grass and employment opportunities (in that order). The ranking from the C2 interviewees had similarities but each participant differed slightly. However, cumulatively for C1 and the C2 participants, the first three choices all related to resource access (thatch grass and fishing), the beach and employment/training.

### *5.3.7.3 Specific benefits*

It may be helpful here to refer back to Figure 5.6 which shows the hierarchy of benefits which emerged as the coding system was developed. Table 5.18 depicts the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most important benefits overall, from the perspective of **both C1 and C2** (the top five benefits according to number of quotes

Table 5.18: Code frequencies for 'Q8-6 Benefits': MNR/K

| **CODE FREQUENCY** (B=Benefit) | **C1 NOMINAL GROUPING TECHNIQUE** | **C2 INDIVIDUAL INTERVIEWS** | **TOTALS** |
|---|---|---|---|
| B: ACCESS TO NATURAL RESOURCES | *17* | *11* | *28* |
| B: Access to natural resources: Collect firewood | 2 | 0 | 2 |
| B: Access to natural resources: Collect sand | 1 | 0 | 1 |
| **B: Access to natural resources: Collect thatch grass** | 12 | 4 | **16** |
| B: Access to natural resources: Fishing | 1 | 2 | 3 |
| B: Access to natural resources: Hunting animals | 1 | 0 | 1 |
| B: Access to natural resources: Other | 0 | 3 | 3 |
| B: Access to natural resources: Places of spiritual importance | 0 | 2 | 2 |
| B: BENEFITS FROM TOURISM/TOURISTS | *1* | *0* | *1* |
| B: Benefits from tourism/tourists: Tourism benefits us | 1 | 0 | 1 |
| B: DESIRES/NEEDS | *0* | *2* | *2* |
| B: Desires/needs: Desire for jobs | 0 | 2 | 2 |
| B: EMPLOYMENT | *7* | *8* | *15* |
| **B: Employment: Benefit from jobs** | 7 | 8 | **15** |
| B: FACILITIES AND INFRASTRUCTURE | *2* | *2* | *4* |
| B: Facilities and infrastructure: Improved infrastructure | 1 | 1 | 2 |
| B: Facilities and infrastructure: Improved security | 1 | 1 | 2 |
| B: GENERAL COMMENTS ON ROLE OF RESERVE | *3* | *0* | *3* |
| B: General comments on role of the reserve: Animals draw tourists | 1 | 0 | 1 |
| B: General comments on role of the reserve: Tourism increases | 2 | 0 | 2 |
| B: LEARNING/TRAINING | *3* | *5* | *8* |
| **B: Learning/training: About environmental awareness/education** | 2 | 3 | **5** |
| B: Learning/training: New skills | 1 | 2 | 3 |
| B: NO BENEFITS RECEIVED | *2* | *0* | *2* |
| B: PERSONAL ENJOYMENT OF RESERVE | *0* | *0* | *0* |
| B: SAVING MONEY | *0* | *0* | *0* |
| B: TANGIBLE BENEFITS FOR COMMUNITY STRUCTURES | *2* | *3* | *5* |
| B: Tangible benefits for community structures: Benefits for sport | 2 | 0 | 2 |
| B: Tangible benefits for community structures: Recipient of land claim | 0 | 1 | 1 |
| B: Tangible benefits for community structures: Revenue sharing | 0 | 1 | 1 |
| B: Tangible benefits for community structures: Support for schools and higher education | 0 | 1 | 1 |
| B: VISITING RESERVE | *15* | *2* | *17* |
| **B: Visiting reserve: Beach** | 12 | 2 | **14** |
| B: Visiting reserve: Seeing animals | 2 | 0 | 2 |
| B: Visiting reserve: Waterfalls | 1 | 0 | 1 |
| **TOTALS** | **52** | **33** | **85** |

* Two C1 notes refer to 'No benefits'.

have their titles and totals in bold). Fewer quotes from C1 are used here to analyse the data because all C1 quotes came from notes where participants made use of brief sentences or one-word answers (for

example, "*Job opportunities*", "*Beach*" and "*We cut the grass*"). To assist in demonstrating the wider picture, the totals for each code group heading (for example, 'Access to natural resources' and 'Facilities and infrastructure') have been added to the table within the grey bars (italicised and centred). Where a code was not used in the particular case study, it was not included in the table. However, the code group headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which benefits are relevant and which are not relevant to each particular case study; and to aid cross-case analysis.

***B. Specifics: Benefits due to having protected area near your home***

In response to this question, C1 produced 52 notes (quotes) on benefits received, while C2 produced 33 quotations in the individual interviews. The code groups with the highest number of quotes were 'Access to natural resources' (28), 'Visiting reserve' (17) and 'Employment' (15). Both constituencies had the most to say about access to natural resources (C1:17; C2:11).

Sixteen out of the 85 responses to this question referred to the **collecting of thatching grass (**C1:12; C2:4). Both parties seemed aware of the importance of this benefit, for example:

> *"There are so many benefits … we are cutting the grass there. We only pay R20 and we cut as many as we can. So we also benefit there"* (P341, 76:76).

> *"The one that I will say [is most important to the communities] ... is the grass harvesting [when the season is open], you will see lots of people coming in for that … they come and stay here for the whole period .... There's a house for them to come and bring their mattresses, their linen and stay there, we provide that. And sometimes they even ask for the period to be extended. I will say it's one of the things that they want, they know that they're going to benefit. So, from that they go and build their houses free, because the zinc … is expensive. ... Grass is much better"* (P342, 345:345).

'**Benefit from jobs**' had the next highest cumulative total, with C1 and C2 virtually viewing this as equally important (C1:7; C2:8). Two quotes from C2 explained the approach taken:

> *"Another thing is that, when we need to renovate (maybe the cottages), we take the local contractors. We don't take people from far. … We've got a database here with all the contractors that are around ... When we hire people from conservationist upwards, we take anybody [i.e. they don't need to be local] – but if it's a field ranger post or general post, we hire here. … Also, when we [have] the interviews, it's us and one community member who comes and watches if the interview was fair"* (P2, 149:151).

> *"The issue was that ... if we have got a broken fence, we want to replace it, we just go and hire people outside. Not going and getting big contractors and so on which will take most of the money to them. But rather the money goes to the community"* (P340, 304:304).

A further C2 quote is an example of one of several projects (such as 'Working for Water' and 'Working on Fire') which are run, employing people on contract. This quote pertains to the 'Coast Care Project': *"During the year they do their training and clean along the coast and in the festive season, they also go*

*and help people. ... the contract is for two years, so those people are cleaning now from Msikaba [to] Mtentu. They walk along the coast and collect all the rubbish"* (P2, 165:168).

**Visiting the beach** garnered 14 quotations, with 12 from C1. The two C2 participants who mentioned the beach ranked it as the fifth and third most important benefit respectively. This could suggest that C2 do not realise the importance of this benefit to local people (C1 ranked it as the top benefit), and that more opportunities to utilise this beach (apart from New Year's Day when transport is arranged) might be appreciated by local people, and increase positive attitudes and behaviour towards the reserve.

Emerging with five quotes in total, was the code '**Learning/training: About environmental awareness/education**' (C1:2; C2:3). For example, a C1 participant noted "*Environmental awareness since Mkhambathi is a declared biodiversity site*" (P282) as a benefit.

To facilitate the greater picture, the totals for each code group heading (for example, 'Access to natural resources' and 'Facilities and infrastructure') have been added to the table within the grey bars (italicised and centred). These figures reveal that '**Access to natural resources**' (28 quotes) is by far the most important set of benefits. This is followed by '**Visiting the reserve**' (which includes the beach) (17) and '**Employment**' (15), for example: *"We benefit from jobs that come from the tourists"* (P331). This exercise also revealed that the benefit category '**Learning and training**' (8 quotes) (which included training for new skills and training in environmental awareness/education) is important as a benefit. 'Learning/training: About environmental awareness/education' was the fourth most utilised code (five quotes from C1 and C2 together). Three quotes below (from C2) are provided to illustrate this benefit category:

> *"And also this skills development – for example, we have trained people ... in hospitality … from the community. And then [for] the field ranging ... we have trained people ... From infrastructure maintenance, like your fencing and so on, we've trained people from the locals"* (P340, 302:302).
>
> *"The reserve also sometimes organises training for the communities … and take them through the Wildlife College for training. Before, while there was the Wild Coast Project, there was ... more, more, more training for the reserve communities. They were trained on management skills, tour guiding and also co-management for the reserve ... So, they benefit. Even the Mkhambathi Land Trust, they are getting more training from ECPTA ... so that they can understand conservation widely and … report to the community what's going on in the conservation areas ... [Local people] also attended the conference whereby they're meeting with and share knowledge with other reserves (... the People and Parks Conference) ..."* (P341, 84:84).
>
> *"There is that ... awareness that we do [with] the communities. We go to the imbizos there in the headman's place. Or we go to the schools and do awareness through our field rangers"* (P342, 312:312).

'**Tangible benefits for community structures**' (5 quotes) also deserve mention and include support for sports and schools, revenue sharing and the land claim.

It is important to also consider **what can be learnt from codes that are not utilised**. Conspicuous by its absence are quotes relating to benefits gained from tourism (which feature more in the DGR/KG and PGR/M case studies). In the MNR/K case, nothing is mentioned in this regard by either C1 or C2, apart from two C1 quotes under 'B: General comments on role of reserve: Tourism increases': *"It's possible to have many tourists who just come to visit and see attractions"* (P257) and *"Tourism benefits due to nature reserve"* (P278); and one C1 mention of tourism (P279) under the category of 'B: Benefits from tourism/tourists: Tourism benefits us'. Benefits from the improved infrastructure (which is a result of the tourism potential of MNR) is acknowledged though via two quotations from each constituency. Two C1 notes, for example, read: *"The government may intervene by maintaining some infrastructure like roads etc."* (P263); and *"There would be more protection for tourists which may also result in the society being protected"* (P258). It would be interesting to compare these results with a reserve where tourism generates more benefits to local people. However, these results suggest that the potential of tourism itself to bring benefits has yet to be fully realised at Mkhambathi. No quotes were coded under 'Personal enjoyment of reserve', which was used for quotes where the use of a reserve for relaxing and so forth were evident. However, it should be remembered that 'Visiting reserve' is mentioned, particularly the beach. The only other category with zero was 'Saving money' due to less transport costs. This is not relevant to MNR. With the reserve being 17 kms away and the lack of transport, those who do work in the reserve are housed within the protected area.

One could surmise that it is more important to focus on the benefits identified by local people (C1), rather than those working for the reserve (C2). However, C2 participants have witnessed individuals benefiting from contract jobs, training opportunities, sports initiatives and so forth. The participants in the C1 focus groups may not have interacted with individuals who have benefited in these ways. Hence, it is important to consider the benefits mentioned by both constituencies, and for stakeholders to continue to emphasise these benefits, and to raise awareness of what the reserve is doing to improve the lives of the community.

Although frequencies are low here and several codes are not utilised by Mkhambathi participants, in Chapter 7 the case studies are compared. At that stage frequencies are higher because all responses from each case study site are included. In addition, qualitative research is less about the numbers than about the content and richness of the data.

### *C. Summary: Benefits due to having protected area near your home*

It is positive that C1 had 52 references to benefits, while C2 mentioned 33. For C1, the top benefits were visiting beach, grass gathering and employment. For C2, the top benefits were employment, grass gathering, access to other natural resources and learning/training about the environment.

Cumulatively for C1 and C2, the top benefits appear to be resource access (especially thatch grass), visiting the beach and employment and training opportunities. Results suggest that C2 could do more in

terms of encouraging visits to the beach, as this is a highly sought-after and appreciated benefit by C1 participants. There seems to be genuine intentionality on the part of C2 to employ locals and provide various types of training opportunities. The data from both constituencies reveal that the potential of tourism to provide benefits to local people is not being fully realised.

Returning to the rationale for the question, the benefits discussed in Section 5.3.7 are those acknowledged by C1 and C2. The ranking reveals the level of importance of these to participants. By the high number of notes, it appears that these benefits are acknowledged and appreciated.

Section 5.3.7, together with Section 5.3.3, contributes towards answering Research Objective 4.

### 5.3.8 Losses due to having protected area near your home

Table 5.19: Orientation to Question 9-7: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q9-7 / L=Losses | Y | | What are the losses (costs/negatives) of having this reserve near to your home? Which of those losses impact the most on you? Which ones impact the least? | NGT |
| | | Y | What are the losses (costs/negatives) to the local community due to living near this reserve? Which of those losses/costs do you think impact the most on them? Which ones impact the least? | II |
| **Research Objective** | | | 4 | |

***A. Overview: Losses due to having protected area near your home***

This question captures participants' perception of losses. Strictly speaking, sometimes these may not be actual losses. However, participants' perception of losses should be investigated as it captures what **they think are losses**. This information is important for management to know, so that it can be addressed.

The loss categories determined by the researcher while developing the coding system for this question included those defined by the community, but were coded to a finer level of detail. In terms of category place (or ranking), the top four losses (following closely on each other) as determined by C1 participants were loss of access to medicinal plants, not being allowed to hunt, not being allowed to fish and loss of land. C2 did not rank loss categories. These first four all relate to reduced resource access. Moving away from the ranking to counting quotes, C1 mentioned more losses than C2, with C1 highlighting 10 types of losses, and C2 three. In total, C1 produced 43 notes containing losses, while C2 had six references in total to losses (in the interviews). Cumulatively, the top loss for both C1 and C2 was 'L: Lack of access to natural resources: Can't collect medicinal plants'. This was mentioned in 11 notes and by four of the five C2 interview participants. 'Can't hunt' (C1:8; C2:0) and 'Restricted fishing' (C1:7; C2:1) followed next, and then 'Loss of land' (C1:6; C2:0).

Based on ranking as voted by C1 and as counted, lack of access to natural resources for the communities surrounding MNR appears to be a significant negative aspect. If all quotes relating to lack of access to natural resources are totalled, C1 has 38 mentions and C2, five.

As was done in Section 5.3.7 on 'Benefits', the discussion is divided into loss category, loss category place and the specific losses (Sections 5.3.8.1 to 5.3.8.3 respectively).

### *5.3.8.1 Loss category*

As explained for the preceding question on benefits, the C1 participants grouped the losses (written on notes) into categories and then named those categories. These original categories were captured within Atlas.ti with their own code set, using the prefix 'L Cat', for example 'L Cat: Can't hunt'. C2 were not asked about categories, because they were not producing notes which needed to be grouped. They were only asked to name the losses which they thought impact the community. This data was explored via network views in Atlas.ti. Figure 5.7 shows the loss categories identified by the community, while Figure 5.8 shows the loss categories developed by the researcher during coding.

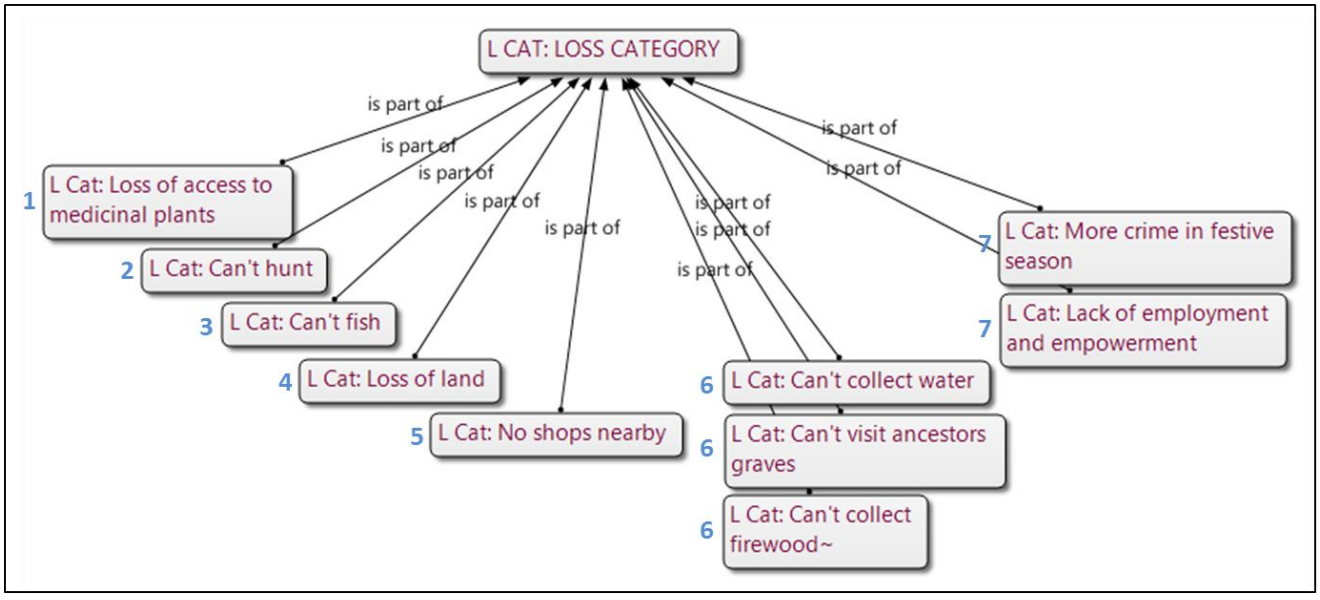



Figure 5.7: MNR/K loss categories as determined by C1 participants according to number of notes

All the categories named by C1 still exist within the researcher's categories, but with a different structure containing three main headings ('L: Lack of access to natural resources'; 'L: Insufficient employment, empowerment and donations'; and 'L: Other'), each with their own sub-headings. For example, C1 listed each resource loss, for example, 'Restricted fishing' and 'Can't collect water' as a separate category, whereas in the researcher's version, these are all grouped under 'Lack of access to natural resources'. The researcher also renamed 'Can't fish' as 'Restricted fishing', because fishing is allowed but permits are required and other restrictions exist such as bag limits.

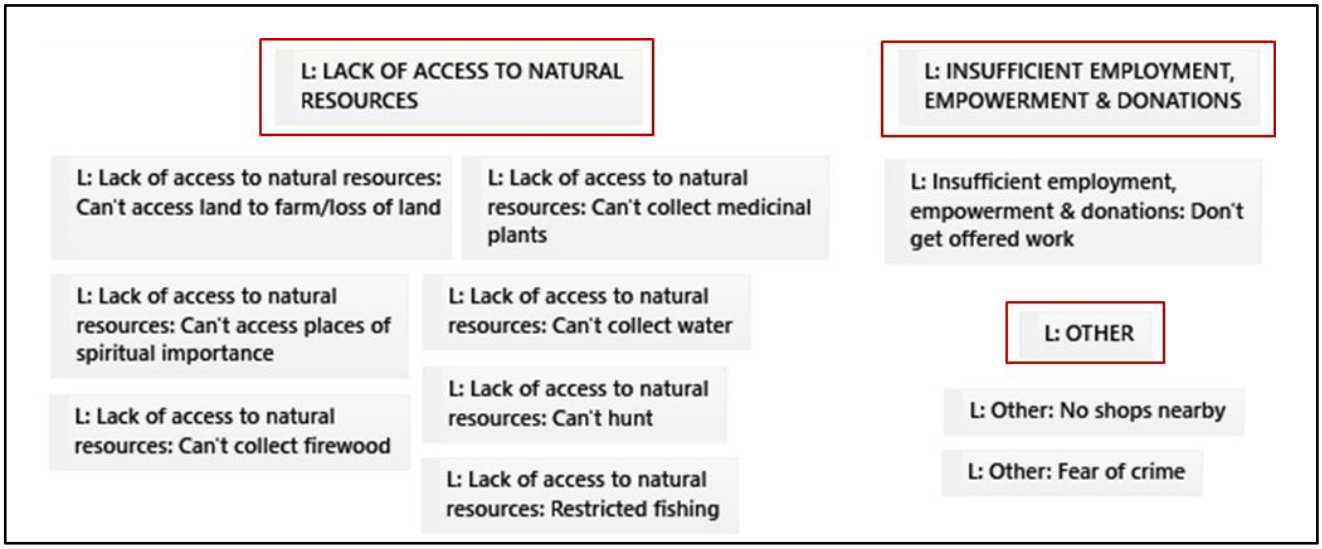



Figure 5.8: MNR/K loss categories as determined by researcher during coding

### *5.3.8.2 Loss category place*

After participants had determined categories, the notes in each category were counted, giving an importance weighting to each category, as indicated by the blue numbers in Figure 5.7. For example, 'Not allowed to hunt' (which had eight notes) was placed above 'Can't fish' (with seven notes). Once again, the researcher asked the group if they agreed with the order of importance of the loss categories. In this case, they did. Column 1 in Table 5.20 shows the category placing according to the C1 votes. C2 participants were asked to mention losses, but were not asked to rank them.

Table 5.20: MNR/K loss category placings: C1

| CATEGORY PLACE (According to C1 vote) | C1 NGT | |
|---|---|---|
| 1 | Loss of access to medicinal plants | (11) |
| 2 | Cannot hunt | (8) |
| 3 | Cannot fish | (7) |
| 4 | Loss of land | (6) |
| 5 | No shops nearby | (3) |
| 6 | Cannot collect water | (2) |
| 6 | Cannot visit ancestors' graves | (2) |
| 6 | Cannot collect firewood | (2) |
| 7 | More crime when people visit during festive season | (1) |
| 7 | Lack of employment and empowerment | (1) |

* Number in brackets is the number of notes produced by C1 participants.

For C1 participants, the top three loss categories decided by the group were 'Loss of access to medicinal plants' (11 notes), 'Cannot hunt' (8), and 'Cannot fish' (7). The fourth one is also mentioned here as it followed on closely after number three, namely 'Loss of land' (6). Just as resource access emerged as an important benefit (where the reserve allows and facilitates controlled access to certain resources), it

surfaces here again as a significant loss (in terms of resources that locals no longer have access to or where access is restricted). It appears that access to natural resources for this rural community is very important.

#### *5.3.8.3 Specific losses*

The reader may want to refer back to Figure 5.8 which depicts the hierarchy of losses which emerged as coding occurred. Table 5.21 shows the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most significant losses overall (i.e. when considering **both C1 and C2**). The top four losses have their titles and totals in bold. The main loss categories overall are also totalled to contribute to the wider picture (totals are centred and italicised with rows shaded in grey). Where a code was not used in the particular case study, it was not included in the table. However, the code group headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which losses are relevant and which are not relevant to each particular case study; and to aid cross-case analysis.

Fewer quotes from C1 are used here to analyse the data because all C1 quotes came from notes where participants made use of brief sentences or one-word answers (for example, "*No collection of water*" and "*Fewer job opportunities*"). Hence quotations are predominantly from C2.

Table 5.21: Code frequencies for 'Q9-7 Losses': MNR/K

| **CODE FREQUENCY** (L=Losses) | **C1 NOMINAL GROUPING TECHNIQUE** | **C2 INDIVIDUAL INTERVIEWS** | **TOTALS** |
|---|---|---|---|
| L: FEAR OF WILD ANIMALS | 0 | 0 | 0 |
| L: INSUFFICIENT EMPLOYMENT, EMPOWERMENT AND DONATIONS | *1* | *1* | *2* |
| L: Insufficient employment, empowerment and donations: Don't get offered work | 1 | 1 | 2 |
| L: LACK OF ACCESS TO NATURAL RESOURCES | *38* | *5* | *43* |
| **L: Lack of access to natural resources: Can't access land to farm/loss of land** | 6 | 0 | **6** |
| L: Lack of access to natural resources: Can't access places of spiritual importance | 2 | 0 | 2 |
| L: Lack of access to natural resources: Can't collect firewood | 2 | 0 | 2 |
| **L: Lack of access to natural resources: Can't collect medicinal plants** | 11 | 4 | **15** |
| L: Lack of access to natural resources: Can't collect water | 2 | 0 | 2 |
| **L: Lack of access to natural resources: Can't hunt** | 8 | 0 | **8** |
| **L: Lack of access to natural resources: Restricted fishing** | 7 | 1 | **8** |
| L: LACK OF INFORMATION/CONTACT | *0* | *0* | *0* |
| L: NO LOSSES INCURRED | *0* | *0* | *0* |
| L: OTHER | *4* | *0* | *4* |
| L: Other: Fear of crime | 1 | 0 | 1 |
| L: Other: No shops nearby | 3 | 0 | 3 |
| **TOTALS** | **43** | **6** | **49** |

***B. Specifics: Losses due to having protected area near your home***

From Section 5.3.7, it is interesting that both C1 and C2 both had much to say about benefits (52 C1 notes from NGT and 33 C2 quotes from interviews). It is positive that these benefits are recognised. Regarding costs/losses, C1 was far more vocal than C2 (43 notes from NGT versus 6 quotes from interviews). In the interest of improving understanding between local people and reserve/tourism management, it is constructive for C2 to recognise the losses identified by C1, and where possible, to address these.

Significantly in the lead in terms of losses is the main category '**Lack of access to natural resources**' (C1:38; C2:5). Although five is not many, the total number of quotes generated by C2 for this entire question was six. Hence, five out of the six quotes related to resource access (the remaining quote concerned lack of employment opportunities). Within the main category of 'Lack of access to natural resources', '**Can't collect medicinal plants**' emerges with the most mentions, namely 15 (C1:11; C2:4). Examples of the 11 quotes from C1 notes are: *"No traditional medicine"* (P327); *"Some people used to dig some medicine there (traditional ones) but now it's not allowed"* (P314); and *"We can't get the herbs now, since there's Mkhambathi"* (P311). The longer quotes from the C2 interviews provide more detail. The conversation below highlights the problem that some local people do not collect natural resources for household use only, but for sale (hence larger quantities are required which can cause depletion). It also emerged that perhaps the plants exist in enough abundance outside the reserve, but only at a level sufficient for local household use, not mass sale elsewhere:

> ***Participant**: "... some of the medicine they want is in the reserve – but there is also medicine in the forests outside the reserve. They've also got those medicines".*
> ***Researcher**: "Ok, so they have got other ways of getting it. So, you don't see that as a loss?"*
> ***Participant**: "Yes, there's something that they always cut and take to Durban and sell. Because the problem is selling – they collect it and go and sell it. It's not that they take something small and use it for healing … they make a business out if it, that's why it's a problem. The area which is outside the reserve is big enough for them to go and collect their stuff"* (P2, 179:181).

Two quotes connected with the issue that local people do not understand why they cannot access these plants within the reserve, for example: *"… most of the people were saying, 'there are so many [medicinal plants] here inside and you [don't let us get them]"* (P340, 221:221).

It is clearly a complex issue. Bulk sale of these plants outside the community is a problem and is also highlighted by Kepe (2007). Awareness of, and education around the issue is important. This education could also extend to how local people can harvest these sustainably. In addition, the initiative mentioned by a C2 participant regarding a nursery where these plants are propagated for cultural awareness could also assist.

In second place is 'Lack of access to natural resources: **Can't hunt**', with eight quotes, all from C1. Examples include: *"We can't hunt now because there's Mkhambathi"* (P291); *"We can't hunt the animals"* (P293); and *"Hunting is prohibited"* (P296). This is an interesting loss since the game was initially stocked by the reserve in the late 1970s when it became a hunting concern. However, prior to 1920 when the Khanyayo people were removed from the land, they would have hunted small game which still naturally existed in the area. It is after 1920 that collection of plant resources, hunting and grazing were forbidden (Kepe, 2004). This loss dating back to the early 1900s thus appears to still be keenly felt by local people and could be exacerbated by the fact that the size and numbers of the game (because it is now a nature reserve) increase the attractiveness of MNR as a food source. C2 did not mention this as a loss, but it is important for reserve management to realise that local people see this as a negative cost to them, and mitigate it by providing targeted environmental education.

'**Restricted fishing**' also received eight mentions, but with one of them being from C2. Four of the C1 notes mentioned that no one can fish [for example, *"No fishing"* (P289 and P317); *"We can't fish* (P316 and P320)], whereas three referred to restricted fishing [for example, *"Lots of restrictions like no fishing without permits"* (P290) and *"Fishing requires permits"* (P319)]. The latter is the reality, as explained by the quote from C2 explaining the bag limits (Section 5.3.3.2). The fact that some C1 participants feel they cannot fish at all points to another area requiring information and orientation. Reserve management could talk about this at the imbizos, for example, discussing where one can fish and how to require a permit.

'Lack of access to natural resources: **Can't access land to farm/loss of land'** received six mentions (all from C1). *"Loss of our land"* emerges four times (P299, P300, P301, P303), while the other two quotes are *"No access to farming"* (P318) and *"Restriction to land use"* (P323). Similar to the hunting issue, the land was taken in 1920 from a small group of people who were living there at the time. The descendants of these families have been financially compensated via the successful land claim. The land now belongs to the community, with a co-management arrangement between the community and ECPTA. However, it appears that the loss of the land for private use remains a source of contention for some people. As arable and grazing land becomes less available, this pressure to want reserve land for their own purposes (not conservation) will increase. Participants could also be alluding to the previous job opportunities from the commercial farming of the TRACOR land. The decreased usage of TRACOR land today (as discussed previously) is a disappointment to some of the participants in this study.

The other resources mentioned received two mentions each (all from C1) and are briefly discussed below. Under '**Can't access places of spiritual importance'**, participants mentioned that they cannot visit their ancestors' graves (P309 and P324). Again, C2 could supply information to C1, communicating that people may visit graves and perform rituals, by arrangement with the reserve (as discussed in Section 5.3.3.1). In terms of locals **not being able to collect firewood and water**, that restriction would need to remain for the sake of conservation. Environmental education could help to increase

understanding of why these natural resources require conservation. As the reserve has done in the past, firewood could be distributed when exotics are removed or old wooden building material is being cleared out. Locals may collect firewood in the TRACOR land.

Finally, the **loss of employment opportunities** is mentioned once by C1: *"Fewer job opportunities"* (P326). This is explained by a C2 participant: *"… before there were many people who were employed [at] Mkhambathi, they were close to 200. There were many, many jobs that were lost. The reserve is busy, but it's having a few staff. It doesn't employ as many as the white people who were there [before] were employing. ... there was a [private] company there, which was employing a lot of people"* (P341, 130:130). The fact that there are **no shops nearby** is mentioned by three C1 participants (P304, P305 and P306). The researcher is unsure how this is a loss or a negative due to the presence of the reserve. Considering it in conjunction with the discussion in Section 5.3.4 regarding C1's desire for more development, it could be an expression of disappointment that development has not been realised, or that expectations they were led to have, have not been realised.

***C. Summary: Losses due to having protected area near your home***

Just as the top benefits related to resource access, so the top losses related to lack of, or restricted access to natural resources. Resource access is thus highly significant for this community. C1 participants were far more vocal on losses (43 quotes) than C2 interviewees (6 quotes). The top losses mentioned by C1 were medicinal plants, hunting, fishing and land. C2 also mentioned medicinal plants, and their quotes suggested that local people feel it is their land but they cannot access the plants. The wording of these quotes imply negative attitudes by C1. One C2 participant did not see it as a loss since there are other areas where these can be collected. Based on the fact that C1 generated 43 quotes under losses, while C2 had only six, could it be that C2 are unaware that these are seen as losses by local people? It is important for reserve management and those involved in tourism to acknowledge the losses felt by locals. They are complex issues, but can be partly addressed by education (for example, on sustainable harvesting of medicinal plants outside the reserve); environmental awareness (for example, on why natural resources within the reserve need to be conserved); and provision of information (for example, on how the fishing restrictions work and how permits can be obtained, and that access to sites of spiritual importance can be arranged).

As was witnessed for Q3-2 Positive Changes and Q3-2 Negative Changes (where more positive changes were mentioned than negative changes) – for Q8-6 Benefits and Q9-7 Losses, in total, more benefits (C1:52, C2:33) are mentioned than losses (C1:43; C2:6). This is positive.

Section 5.3.8, as well as Sections 5.3.7 and 5.3.3, contributes towards answering Research Objective 4.

### 5.3.9 Dreams for an ideal future

Table 5.22: Orientation to Question 14-10: MNR/K

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q10-8 / D=Dream | Y | | For you, living near this reserve, what is your ideal future for your community? What is your dream situation? | FGI |
| | | Y | For this local community, living near this reserve, do you have any ideas on what could be an ideal future for them? | II |
| **Research Objective** | | | 6 | |

#### *A. Overview: Dreams for an ideal future*

Table 5.23 outlines the results for this question. Only one code category emerged with significantly more quotations than others. 'More employment and development' received six quotes (C1:5; C2:1). 'Community projects and financial aid' and 'Conservation/tourism ethos spread into LC' had two quotes each, with all quotes emanating from C2. 'Environmental education' also elicited two quotes, one from each constituency, while the two quotes under 'Interaction with reserve' came from C1. Finally, 'Change LC boundaries' and 'Facilitate entrepreneurship' had one quote each from C2.

Although quote numbers are low for this question, for C1, 'Employment and development' and 'Interaction with reserve' emerge as their top two; while for C2, these are 'Community projects and financial aid' and having a 'Conservation/tourism ethos spread into the local community'.

Table 5.23: Code frequencies for 'Q14-10 Dream': MNR/K

| CODE (D=Dream) | C1 | C2 | TOTALS |
|---|---|---|---|
| D: More development and employment | 5 | 1 | 6 |
| D: Community projects and financial aid | 0 | 2 | 2 |
| D: Conservation/tourism ethos spread into local community | 0 | 2 | 2 |
| D: Environmental education | 1 | 1 | 2 |
| D: Interaction with reserve | 2 | 0 | 2 |
| D: Change local community boundaries | 0 | 1 | 1 |
| D: Facilitate entrepreneurship | 0 | 1 | 1 |
| **TOTALS** | **8** | **8** | **16** |

#### *B. Specifics: Dreams for an ideal future*

For this final question, the data are displayed differently. In order to reflect all the dreams expressed by participants, their quotes are organised in table format under the relevant code (Table 5.24). The reference within Atlas.ti and the constituency (C1 or C2) from which the quote originated, are also indicated in the table. A brief analysis takes place in the summary of Section 5.3.9.

Table 5.24: Dreams of C1 and C2 for an ideal future: MNR/K

| 1 | MORE DEVELOPMENT AND EMPLOYMENT | REF. | |
|---|---|---|---|
| | *"To go back to being privately run – more jobs, nicer place. It must be a well-developed place like Wild Coast Sun".* | P337, 15:15 | C1 |
| | *"Attractions to be more inclusive to increase tourist numbers. Better advertising".* | P337, 16:16 | C1 |
| | *"Bring in the Big Five".* | P337, 17:17 | C1 |
| | *"To be like other reserves. What we see on TV is wow places. Mkhambathi is not like that".* | P337, 18:18 | C1 |
| | *"More development. More jobs. Increased standard of living. Decreased poverty".* | P337, 13:13 | C1 |
| | *"Improved development in the reserve – increased infrastructure, 5-star hotels, permanent jobs (not temporary). The Big 5 won't work, but other attractions in the reserve like campsites, cultural villages near the reserve, where they can sell handwork, and so on".* | P341, 182: 182 | C2 |
| **2** | **COMMUNITY PROJECTS AND FINANCIAL AID** | | |
| | *"[From] the profits that are generated in the reserve, some percentage is going to the community. So, from those profits, a community structure will be appointed to use those profits in a good way for the communities to be uplifted from the status that they are at ... like maybe to build local gathering areas, halls or whatever is needed ... So, the people in the community will be happy and the reserve will not get any disturbance from the people. From the monies that they get … they'll be happy also, and the game will be [protected] ...".* | P342, 438: 438 | C2 |
| | *"It is just small projects, but [when] the new Chief Operations Officer ... came here ... I was giving her a presentation with the people coming from the legislature with the Eastern Cape Department of Environmental Affairs. Then ... she said, 'you see these programmes'? She wants these programmes all over this coastline. Because these are good programmes. And the legislature was saying these are the reports that we would like to see. ... These are the things that we want. So … when we motivate for funding, [we can say] you say [you] want this and it could be made bigger. It was nice to hear that".* | P340, 364: 364 | C2 |
| **3** | **CONSERVATION/TOURISM ETHOS SPREAD INTO LOCAL COMMUNITY** | | |
| | *"To me, the communities around here, they are in the really remote areas. I feel like their gold is nature. That is, conserving these natural resources that they have. To me, it's their gold – that they can live on. ... if people can all realise and be responsible for their areas. To me a nature reserve is a sample of what we would like the whole area of Mkhambathi to look like. In Mkhambathi ... we have game, ... trees, scenic views which attract people. … We have got accommodation facilities. For me, what we practise here, could be something that is happening within this whole area. … you can have campsites outside there [and] homesteads that will be used by visitors. We could conserve those important plants that are outside there. So that whoever comes in can have a tour of this area. A person comes and [goes to see] huts and beautiful scenic views and sleeps over within the villages. You can come to a traditional house where you enjoy traditional dance, traditional food or whatever. You could enjoy these [community routes] ... which [can be an extension of] the nature reserve ... It is very safe for every person to move around. That's what I always think of ... Just having a nature reserve on its own and protecting it doesn't mean [anything] to me – because we want to expand these areas. … that's the only good that people [will get] ...".* | P340, 349: 349 | C2 |
| | *"For example, we have got this programme, the N2 toll road. [It's] seemingly going ahead. [It seems] we are defeated in terms of saying 'no, we don't want a toll road'. But we ask 'what benefits would it bring in terms of conservation? … in terms of benefiting people?' Because we need projects that will be coming out of this. For example, once they are building the road they will be disturbing the whole area. In terms of rehabilitation we need people to benefit out of that [to help remove important plants]. We need to have a certain area where we will put those plants, and people will benefit [from] that project. So, I'm trying to say – we want an area whereby people will take conservation into their own hands".* | P340, 358: 358 | C2 |

| | | |
|---|---|---|
| **4 ENVIRONMENTAL EDUCATION** | | |
| *"People to guide others, so that tourists are sensitive and don't destroy".* | P337, 19:19 | C1 |
| *"The department should create more projects that involve the local community, so they can understand conservation. More promotion of environmental education in the communities".* | P341, 182: 182 | C2 |
| **5 INTERACTION WITH RESERVE** | | |
| *"More communication between Mkhambathi and us, so that we can understand each other better".* | P337, 14:14 | C1 |
| *"Communicating to each other".* | P337, 13:13 | C1 |
| **6 CHANGE LOCAL COMMUNITY BOUNDARIES** | | |
| *"The dream for the reserve: For me, for the reserve to survive and the people to be happy, Msikaba and Mtentu are not part of the Mkhambathi Land Trust. But for me, they are a big part of Mkhambathi Nature Reserve, because they are the adjacent communities. They are the first people to see what's happening, [but] they are not included. If you include those inside, we'll have very minimum poaching, because … most poachers are from the Mtentu side and some … from Msikaba. Few of them are from the upper communities, because they are involved in [the reserve]. So, for the animals to live freely … we first need to include the two [communities] [just outside] the reserve, in the management of the reserve".* | P342, 436: 436 | C2 |
| **7 FACILITATE ENTREPRENEURSHIP** | | |
| *"Let me talk about the fishing. In some areas like Mboyki and … Msikaba, tourists come and employ … local people to carry the bags for them when they fish. Some of the local people they also fish for them. And also, the firewood. In some areas the local people are cutting the firewood and they … sell it inside the reserve … they split the money. If the bundle is R10 … the reserve will get R2, the local people will get R8 … And also this sand mining … the only thing they must do is get the permit from the Department of Minerals and Energy … So that conservation [staff] don't trouble them. So, they can demarcate where to dig sand. They can make money from that sand by organising block making machines … If the reserve needs some blocks, we can just go locally and buy those blocks/bricks. And also the treated poles. They've got the forest. They can cut the poles and make treated poles, and then, when the reserve wants to change their fences, they can buy from the local people. When we do fencing, we should hire them to come and do the fencing. Not hiring people from East London or Port Elizabeth. Just take contractors from the locals. Because we did train them on fencing … They came and helped us to do the fencing. We need to use the local people. Or even, we supply them with material and they just supply us with their skills and labour. Another thing we did for the community - there's a shop inside the reserve which is run by a local guy, and then we sit down with him and tell him that our tourists need this … and our staff need this …".* | P2, 237: 251 | C2 |

REF=Reference within Atlas.ti.

### *C. Summary: Dreams for an ideal future*

The desire of C1 to see **more development and employment** stands out above the rest. It is clear that the potential of MNR is not being fully realised. Budget constraints and failed private sector investment attempts form part of the reason for this downfall. Locals wish to see the reserve rise to its former stature and recognise the enormous potential of this special place to bring much needed development and employment. The type of development would need to be carefully negotiated, but is direly needed. The dream of '**Facilitate entrepreneurship**' also connects to this, as a C2 participant reflected on the

numerous micro employment opportunities that could be realised, ranging from assisting tourists to sustainable sand mining resulting in bricks for the reserve to using trained locals to repair reserve fences. **Community projects and financial aid** are a recurring theme throughout this chapter. In spite of constraints, there are clear efforts by Mkhambathi management to improve the lives of local people. A genuine desire exists to have the surrounding communities being an extension of the reserve, utilising the natural beauty of their areas to draw tourists and create employment opportunities. As one C2 participant states, 'nature is their gold', and as they 'mine' this resource, the dream is for a **conservation and tourism ethos to spread throughout the surrounding communities**.

The need for **environmental education** and the desire on the part of C1 to **interact with the reserve** were highlighted under 'Q7-5 Responsibility', and emerge here again. Enabling local people to understand conservation and its importance is essential and can facilitate a better relationship. Interaction by the reserve with local people is also vital and need not be particularly complex. Open and continuous lines of communication between C1 and C2 to aid understanding could achieve much in this regard.

Finally, the dream to **include the two communities bordering the reserve** into the co-management agreement and Board of Trust (since they are the closest) is articulated.

It is interesting to note that two direct links between benefits and behaviour emerge in the dreams: A C2 participant stated that few people from the upper communities poach because they are involved in the reserve; while another C2 quote mentioned that as profits accrued to the community, the reserve would get less disturbance from people.

Section 5.3.9, together with Section 5.3.4, contributes towards answering Research Objective 6. Sections 5.3.1 to 5.3.9 contained the results and analysis for each question put to participants. The next section (Section 5.3.10) briefly deals with cross-question analyses.

## 5.3.10 Cross-question analyses

### *5.3.10.1 Comparisons across questions: Benefits, Losses, Positive changes and Negative changes*

The purpose of this comparison is to investigate whether any pattern occurs between benefits and losses and positive and negative changes. Figure 5.9 indicates the results for C1 only, while Figure 5.10 depicts the frequencies once the C2 data have been added.

***(a) Results: C1***

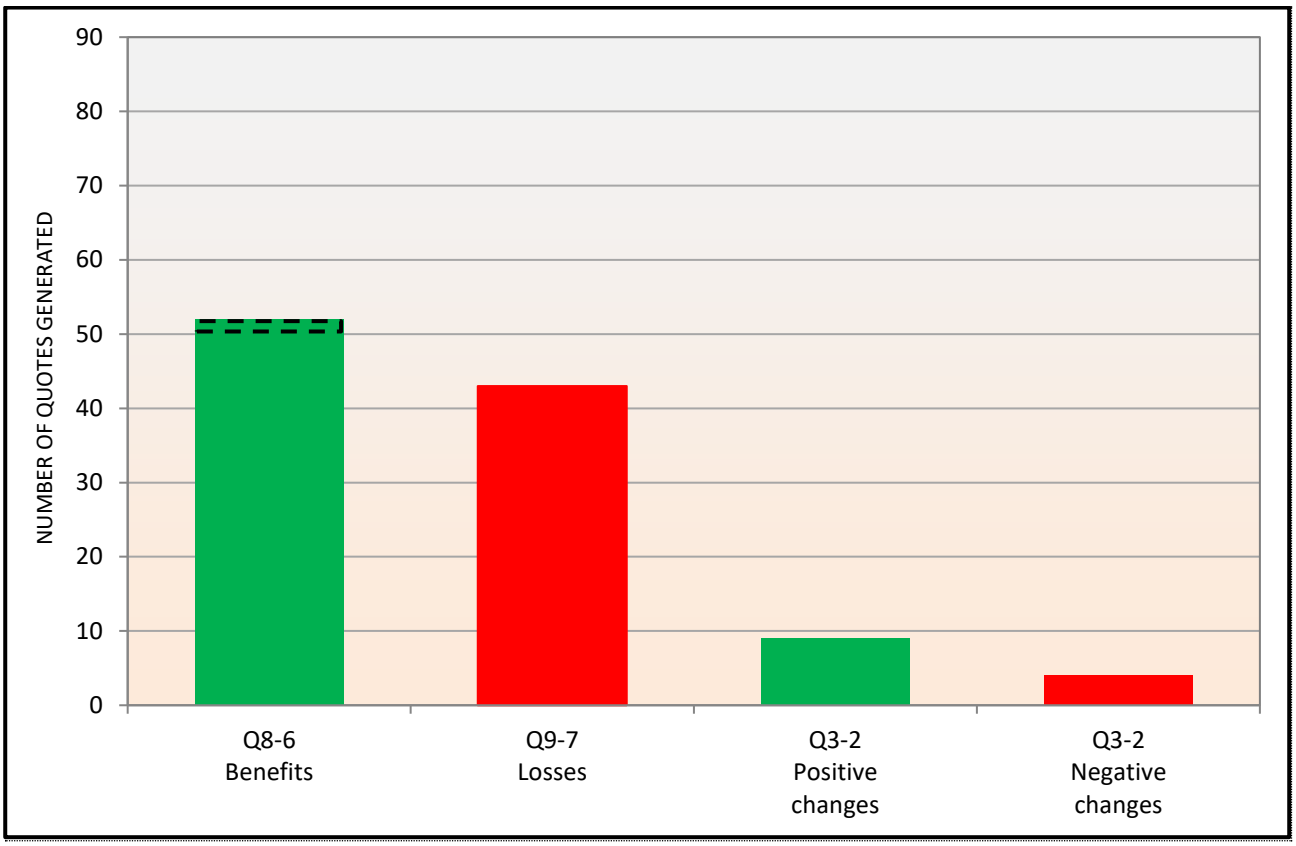



Figure 5.9: Cross-question comparison: C1 only (MNR/K)

***Interpretation and summary***

C1 identified more positive aspects (benefits and positive changes) than negative (losses and negative changes). Overall, these results are mildly encouraging, and appear to suggest that in terms of benefits recognised, the community around Mkhambathi is moderately more positive than negative. Far more benefits than positive changes were identified. The top benefits were tangibles (beach, thatch and employment) (Table 5.18). Not many positive changes were mentioned, but they were a mix of tangibles (for example, employment, facilities and infrastructure) and intangibles (for example, collaboration and enjoyment of reserve). The two quotes which indicated that no benefits were received are indicated by the dotted rectangle in the first bar, and hence cannot be counted as benefits.

***(b) Results: C1 and C2***

In Figure 5.10, the C2 data are included to see whether this affects the results.

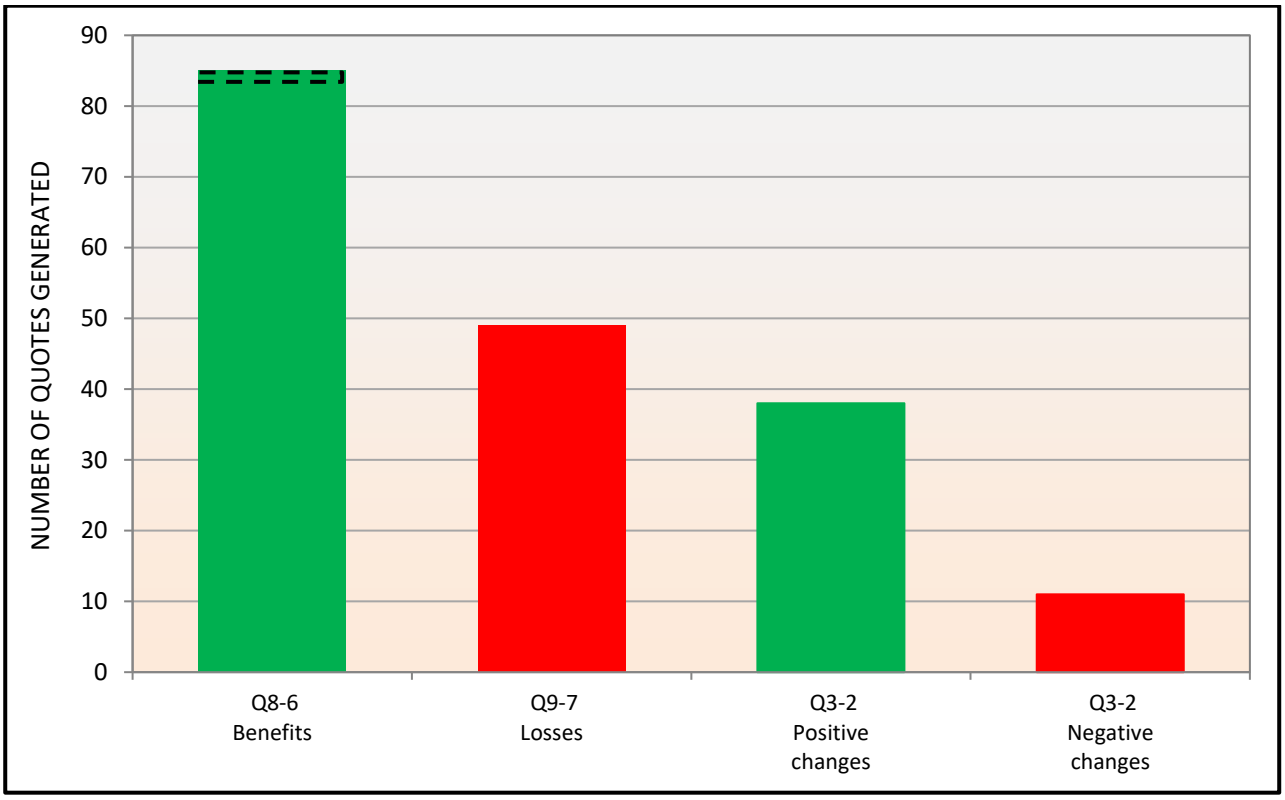



Figure 5.10: Cross-question comparison: C1 and C2 (MNR/K)

***Interpretation and summary***

The frequency of benefits and positive changes increased considerably once C2's answers were added. Losses and negative changes increased slightly. It is expected that the frequency in all the questions would increase as one adds more data. However, the fact that benefits and positive changes increased far more than losses and negative changes indicates that C2 is largely positive regarding what local people receive from the reserve. As was mentioned in the discussion on positive changes (Section 5.3.3.1), C2 are far more vocal regarding these positive changes than C1. Either C1 are unaware of them or do not see them in that light.

### *5.3.10.2 Comparing frequencies of answers: Relationship, Negative changes, Positive changes, More positive, Responsibilities, Benefits and Losses*

The purpose of the scatter graph (Figure 5.11) is to compare the frequency of responses of C1 and C2 to these questions. Only those with wide and/or interesting discrepancies (indicated with red frames) are discussed in the interpretation and summary below.

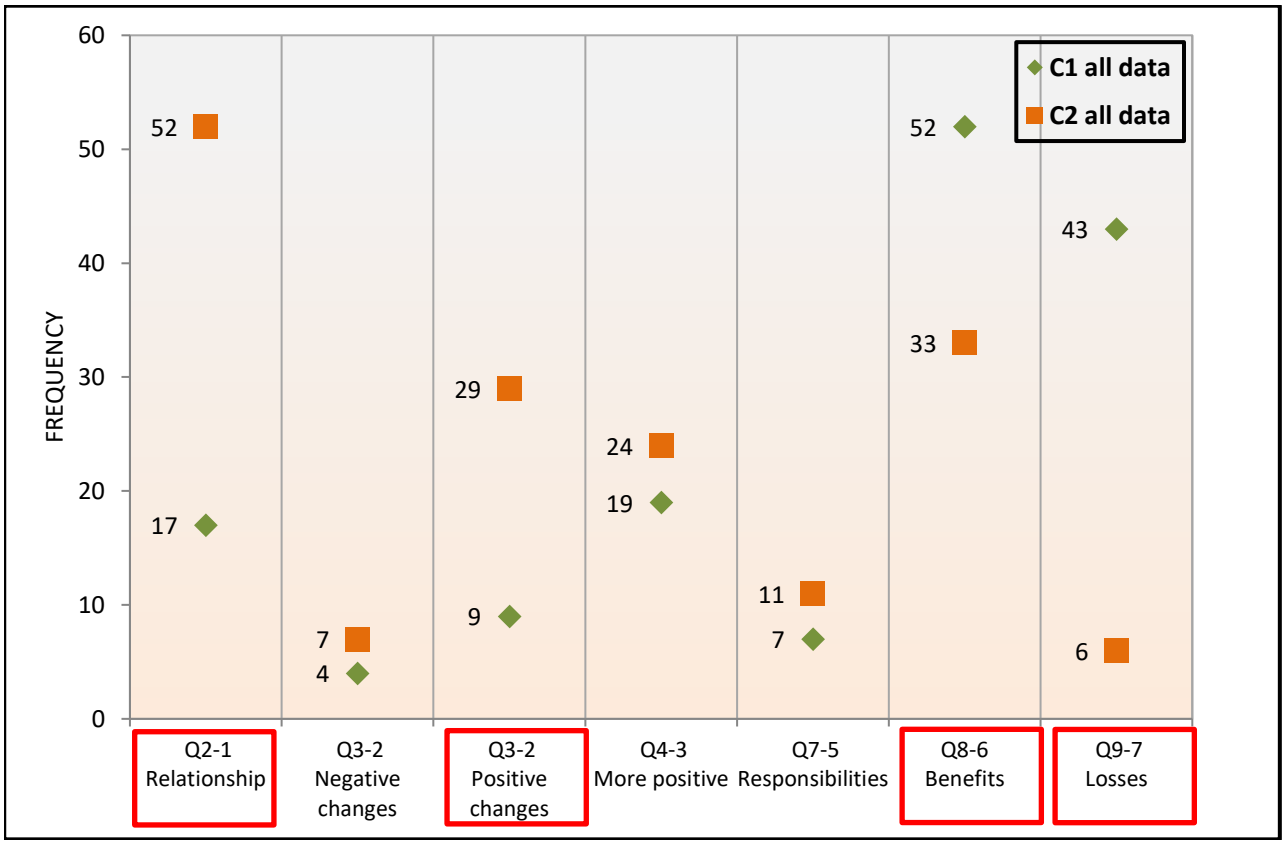



Figure 5.11: Quote frequency comparison across questions: MNR/K

***Interpretation and summary***

C2 are considerably more vocal and positive regarding the **relationship** between the local community and the reserve, mentioning several actions taken/planned by C2 which positively affect this relationship (C1:17, C2:52). Also regarding positivity, C2 mention far more **positive changes** than C1 (C1:9; C2:29). This point has emerged strongly in the MNR/K case study. Furthermore, C2 do not seem to realise the **losses** perceived by C1 (C1:43; C2:6). It is interesting though that when it comes to **benefits**, C1 were more expressive (C1:52; C2:33).

### *5.3.10.3 Most common words used*

To end the cross-question analyses, a word cloud is used as a data visualisation tool to present the most common words emerging from all the Mkhambathi documents combined (i.e. all transcripts from the FGIs and IIs, and all notes generated during NGT). Figure 5.12 presents all words used 20 times or more, with the word size indicating how often it was used. The word 'people' is the most common with 'community' and 'benefits' linking to this. Among the smaller words are some of the benefits such as collecting 'grass' and visiting the 'beach'. On the environmental side, the word 'nature' is mentioned the most, followed by 'environment'. 'Impact', 'actions' and 'land' are other significant words.


Figure 5.12: Most common words emerging from MNR/K participants

## 5.4 Chapter 5 summary

Chapter 5 presented the data for Case Study 2: Mkhambathi Nature Reserve/Khanyayo. It began by explaining the management and ownership structures for Mkhambathi, followed by a background on the reserve and the community of focus, namely Khanyayo. The responses from both constituencies were analysed for each question put to participants, with an overview being provided, followed by the specifics of the data and then a summary. This chapter covers several research objectives, and contributes towards addressing them by analysing the MNR/K data. In Chapter 7, the research objectives are addressed again in the form of cross-case analysis, where the findings from all three case studies are considered. In the final chapter (Chapter 9), each research objective is briefly revisited.

Section 5.3.1 (Knowledge and Experience) consisted of three groups of questions and addressed Research Objective 2. Sections 5.3.2 and 5.3.5 (Relationship and Others' views) answered Research Objective 3. The data on Responsibilities towards the reserve addressed Research Objective 5 (Section 5.3.6); while Research Objective 6 was covered by Sections 5.3.4 and 5.3.9 (Increasing positive attitudes and Dreams for an ideal future). Finally, Research Objective 4 was covered by four questions dealt with

in Section 5.3.3 (Positive and Negative changes) and Sections 5.3.7 and 5.3.8 (Benefits and Losses). Section 5.4.1 below draws the responses from all four questions (Positive and Negative Changes, Benefits and Losses) together in the form of a summary to holistically address Research Objective 4 for the MNR/K case study.

A few cross-question analyses were also considered in Section 5.3.10. Chapter 5 ends with the creation of a summary for Case Study 2 from the perspective of C1 and C2 (Section 5.4.2), followed by a holistic summary to address the research aim for this particular case study (Section 5.4.3).

The three case study chapters fulfill the first layer of data analysis and interpretation. The second layer occurs in Chapter 7 (Cross-case analysis and interpretation) and the third and fourth in Chapter 8 (Theory, recommendations and framework). Chapter 9 concludes the study.

### 5.4.1 Summary of benefits, losses and other factors influencing attitudes and behaviour

Research Objective 4 sought to identify the benefits received and losses incurred by the local community, as well as other factors which could influence attitudes and behaviour towards the protected area. In this section, the researcher **drew from each question asked of participants in order to answer Research Objective 4 for the Mkhambathi/Khanyayo case study**. In Chapter 7 (Cross-case analysis and interpretation), findings are drawn from all three case studies to address this objective definitively.

**(a) Benefits and losses**

*Benefits*

- Personal experience and enjoyment of reserve, particularly the beach, appears to increase positivity towards the reserve.
- Access to thatching grass as a natural resource encourages positive attitudes.
- Employment and training opportunities are identified as benefits and increase positivity.
- Some improved facilities and infrastructure are noted as a positive change due to the presence of the reserve.
- The Schools Competition is recognised as a positive action that has increased environmental understanding and positivity towards the reserve.
- The Wild Coast Project was often mentioned as an initiative that built capacity and improved relationships. Its influence on positive attitudes and behaviour continues today (although the project has ended). Direct positive behaviours from this have been community members reporting escaped animals, fires and poachers.

[Several community beneficiation projects exist, but locals seem largely unaware of these, therefore these may not be encouraging positive attitudes].

*Losses*

- Loss of access to natural resources is significant, especially medicinal plants, and animals and fish as food sources.
- Some view losing the land to the nature reserve as a loss, and this does have an impact on negativity. This loss is exacerbated by the fact that the reserve is deteriorating.
- Disappointment and distrust regarding the Board of Trust significantly fuels negative attitudes.
- Disappointment with reserve's deterioration and lack of action has caused significant negativity.
- Low employment/fewer employment opportunities than before increases negativity.
- Lack of information on the reserve causes negative attitudes.
- A sense of exclusion, compared to involvement in the past, increases negativity.
- The tourism potential of the reserve is barely tapped, which causes negativity.
- Insufficient development and infrastructure within both the reserve and the community causes negative attitudes.

**(b) Other factors**

- Locals acknowledge appreciation of the reserve, which demonstrates positivity.
- Some recognise conservation as a positive change, and are hence well disposed towards it.
- Locals acknowledge collaboration as a positive change wrought as a result of the reserve.
- The request for more interaction and communication with the reserve suggests that the presence of this can improve attitudes towards the reserve.
- Involvement appears to reduce poaching. Less poaching occurs by the communities that are part of the seven villages, than other communities.

### 5.4.2 C1 and C2 summary

This was achieved by taking the 'Summary' sections at the end of each question and simplifying them into a table (see Table 5.25 on the next page). This summary (which assists in reducing the data) still presents C1 and C2 **separately**, and according to each section (Sections 5.3.1 to 5.3.10). The summaries for all three reserves are used in the cross-case analysis (Chapter 7). Various notations are used to aid the summary that follows, namely > (greater than) and & (and).

### 5.4.3 Mkhambathi Nature Reserve/Khanyayo community summary

The final step in each of the case study chapters is to combine the results from C1 and C2 to create a holistic summary for this case study, which reduces the data further. This was done by using Table 5.25 to extract the necessary information to answer the research aim for **this** case study. The reader is reminded that the research aim for the study is to **identify, investigate and represent the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas**.

Table 5.25: C1 and C2 summary: Mkhambathi Nature Reserve/Khanyayo community

| C1 | C2 |
|---|---|
| **KNOWLEDGE AND EXPERIENCE OF PROTECTED AREA** | |
| Average to good knowledge of reserve | |
| Community leaders more vocal on make-up & history of reserve; while younger people said more on activities in reserve | |
| Nature is the focus | |
| Resource access is an issue & unclear | |
| Most have visited reserve | |
| Thoroughly enjoyed experience, with beach as main highlight | |
| **RELATIONSHIP BETWEEN COMMUNITY AND PROTECTED AREA** | |
| Less positive than C2 | More positive than C1 & testify to existence of good relationship |
| Dissatisfied with benefits | Highly aware of initiatives that improve relationship |
| Less aware of poaching | More aware of poaching (education, interaction & good relationship is key to decrease this) & other environmental concerns |
| Acknowledge appreciation of reserve/resources | |
| Largely unaware of many of the community beneficiation projects in place | |
| Want more traditional large-scale development | |
| **POSITIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| Access to natural resources | |
| Say less regarding positive changes | Most verbal on access to natural resources & employment |
| Acknowledge access to natural resources | More talk & detail regarding positive changes. So C2 need to communicate these to C1 as actions by reserve that are good for C1 |
| Recognise importance of conservation | Fire awareness & teacher training (education & training programmes) are a positive change |
| Acknowledge collaboration, employment, facilities & infra-structure, & enjoyment of reserve (mix of tangible & intangible benefits) | Assistance for local schools & sports programmes (i.e. community projects) are positive changes |
| Seem unaware of several of the positive changes mentioned by C2 | |
| Community leaders more aware of positive changes than younger group | |
| **NEGATIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| Disappointment & distrust regarding Board of Trust | Aware that prohibited/limited access to natural resources is an issue for C1 |
| Disappointment regarding reserve deterioration (lack of action & fewer jobs than previously) | |
| **INCREASING POSITIVE ATTITUDES TOWARDS PROTECTED AREA** | |
| Development & infrastructure vital for C1 & tourists, & will increase employment (direly needed) | Did not name development & infrastructure as factors that could increase positivity |
| Not seeing community projects as interventions that increase positivity | Genuine desire to see C1 benefit tangibly & intangibly from community projects |
| | Recognise importance of information, education & training to C1 positivity levels (& have several initiatives in place) |
| Employment noted as a factor that can increase positivity | |
| Interaction with & transparency of board is essential | |
| **OTHERS' VIEWS ON PROTECTED AREA** | |
| Mixed but mainly negative because of lack of information, & frustration due to lack of development & low employment | |
| **RESPONSIBILITIES TOWARDS PROTECTED AREA** | |
| Not averse to responsibility, but some feel excluded. This negatively impacts on attitudes | Capacity building/training builds relationships which evoke protective behavioural actions (C1 report escaped animals, fires, poachers) even after tangible benefits gone. Wild Coast Project significant in this regard |
| Want to be involved (can be simple ideas) | Need to share information with C1 (C1 wants to know what is going on). This builds relationships |
| Environmental education in wider community is important to understand impact on environment | |
| Schools Competition has had positive impact in increasing understanding | |

| C1 | C2 |
|---|---|
| **BENEFITS DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Top: Beach & Thatch > Employment (mix of tangible & intangible benefits identified) | Top: Employment > Thatch > Access to other natural resources & Learning/training about environment (mix of tangible & intangible benefits identified) |
| | C2 may not realise significance of beach to C1 – more visits could be facilitated to increase positivity |
| Resource access (especially thatch) > Beach > Employment/Training | |
| | Real intentionality exists from C2 to employ & train locals |
| Tourism potential to provide benefits is barely tapped | |
| **LOSSES DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Loss of access to resources is significant.<br>Top: Lack of access to: Medicinal plants > Hunting > Fishing > Land | C2 barely vocal, but acknowledge lack of access to medicinal plants. Need to acknowledge that C1 see these as losses. Complex but can be addressed by environmental education (e.g. sustainable medicinal plant harvesting), awareness & information (e.g. how fishing restrictions work) |
| More vocal regarding losses | |
| **DREAMS FOR AN IDEAL FUTURE** | |
| Top: Desire to see more development & employment (much unrealised potential) | Clear efforts by management to uplift local community & a dream to see conservation & tourism ethos spread throughout community, with locals benefiting from attractions in their area/entrepreneurship opportunities, i.e. an extension of the reserve |
| Environmental education for locals and tourists | |
| Communication/interaction with reserve is essential & desired by C1. This results in good relationships | Change boundaries of defined local community to include communities bordering Mtentu & Msikaba Rivers. Included communities poach less because they are involved |
| **CROSS-QUESTION ANALYSES** | |
| More benefits & positive changes are mentioned than losses & negative changes | When including C2's answers, benefits & positive changes increase far more than losses & negative changes, i.e. C2 is largely positive regarding what C1 get from reserve |
| Community appear to be more positive than negative | C2 differ greatly from C1 in terms of acknowledging losses & negative changes. Need to be aware of what C1 view as losses/negative changes & address |
| C1 far more vocal on benefits received than C2 | C2 far more vocal on relationship, mentioning actions taken by C2 which positively influence relationship with C1 |
| C1 is considerably more vocal on losses incurred than C2 is | C2 also more vocal on positive changes |

*Section 5.4.3 continued …*

The answer to the research aim for the Mkhambathi Nature Reserve/Khanyayo Case Study is divided into:

- context (mainly taken from the cross-question analyses);
- present situation ['We are positive (+) because ...' and 'We are negative (–) because ...'];
- factors that could make local people more positive (+) in the future; and
- constraints (challenges identified in the analysis).

In addition to '+' and '–', various notations are used to aid this summary, namely > (greater than), = (equals); LC (Local Community) and & (and). In addition, the direction of the thumb indicates the overall level of positivity for this particular case study.

Figure 5.13 thus presents the MNR/K case study summary. This contributes to the cross-case analysis in Chapter 7. In Chapter 8, the holistic answer to the research aim and question (drawn from **all three** case studies) is provided in the form of a theory and a framework.

## MKHAMBATHI NATURE RESERVE/KHANYAYO COMMUNITY

**What influences attitudes and behaviour of local community towards protected area?**

**CONTEXT = POSITIVE**

Benefits & Positive changes > Losses & Negative changes
Benefits recognised show more positivity than negativity
LC familiar with reserve & enjoy it

Here & Now

Tangible & intangible benefits

| WE ARE ✚ BECAUSE | WE ARE ▬ BECAUSE |
|---|---|
| Access to natural resources (thatch) | Lack access to natural resources (e.g. medicinal plants, fishing) |
| Employment & entrepreneurship opportunities | Lack of development/infrastructure (great potential but largely unrealised) |
| Appreciate reserve & its resources | Lack employment/ low employment levels |
| Use & enjoy reserve, especially beach | Dissatisfied with benefits |
| Recognise importance of conservation; Schools Competition has increased understanding | Unaware of several positive initiatives |
| Genuine intent from reserve to see LC uplifted & benefiting, with a good relationship | Disappointed by reserve deterioration & lack of action |
| Several initiatives run by reserve: Schools & sports programmes, environmental education & training | Disappointed with Board of Trust |
| Collaboration | Lack information |
| Improved infrastructure (e.g. road) due to reserve being there | Sense of exclusion |
| Past involvement/training built relationships which invokes protective attitudes & behaviour | |

FUTURE

| THESE COULD INCREASE ✚ |
|---|
| Development & infrastructure that brings employment (maximise tourism potential) |
| Want to be involved (need not be complex) |
| Want reserve to share information; know what's going on (increased communication) |
| Desire environmental education |
| Board of Trust should interact more & be more transparent |
| Reserve can communicate all their initiatives & programmes to LC, so that they are seen as benefits |
| Resurrect Wild Coast Project, which was significant in evoking positive attitudes & behaviours |
| Reserve should acknowledge losses & negative changes voiced by LC & address with environmental education, awareness & information |
| Entrepreneurship, micro-employment opportunities & training |
| Spread conservation & tourism ethos throughout LC via locals being involved in conservation & running own tourism initiatives in villages (seeing villages & their environment as extensions of reserve) |
| Facilitate more opportunities to visit beach (seen as main benefit) |
| Include Mdengane & Amadiba communities into co-management arrangement |

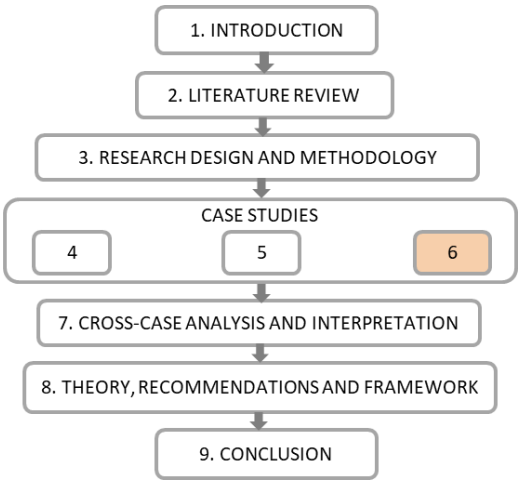
CONSTRAINTS

Large community; low budget; government inertia

Figure 5.13: Mkhambathi Nature Reserve/Khanyayo community summary

Chapter 6

# Case Study 3: Phinda Private Game Reserve and Mnqobokazi community




*"Phinda was exactly what I was looking for, a conservation development model where Londolozi could be replicated. We could take abused land and turn the clock back to when the African landscape had been pristine and we could prove that land under wildlife would have the potential to strengthen rural economies".*

(Dave Varty, 2008:86)

## 6.1 Introduction

This chapter provides a brief background to Phinda Private Game Reserve and the Mnqobokazi community (also known as Kwa Mnqobokazi), followed by a detailed description of the results emanating from the data collected at this reserve and in the local community. Results are presented and analysed question by question, each ending with a summary, followed by a few cross-question analyses. At the end of the chapter, these summaries are used to create a summary for each constituency (C1 and C2), followed by a holistic summary for this case study site. This process is followed in all three case study chapters, and constitutes 'Analysis and interpretation layer 1' (Figure 1.3).

Phinda was chosen as one of the case studies for this research because, in terms of the management and ownership structures, it is a private game reserve, managed by &Beyond, offering high end tourism. Some of the land within the reserve is owned by local communities who won land claims. This land is rented from these communities by &Beyond. Unlike the other two case studies, it has a dedicated organisation, Africa Foundation, which focuses on community involvement and beneficiation. Regarding the level of improvement in human wellbeing for surrounding communities, the relationship between the reserve and the community can be considered as well established, with various economic and social upliftment programmes in place. Within the conservation and tourism realm, Phinda is largely perceived as being a successful model.

## 6.2 Background to Phinda Private Game Reserve and Mnqobokazi community

### 6.2.1 Location and constitution of nature reserve

Phinda Private Game Reserve (PGR) is in the northern part of KwaZulu-Natal (KZN) province. It forms part of the Mun-Ya-Wana Conservancy, which comprises Phinda, Zuka Private Game Reserve and SKS Estates (which represents a property known as Bumbeni) (Martindale & Naylor, 2017). The conservancy totals 28 000 ha and lies between Mkuze Game Reserve (which is government managed) and iSimangaliso Wetland Park (IWP) (managed by the iSimangaliso Wetland Park Authority, on behalf of government). IWP was formerly known as the Greater St Lucia Wetland Park and is a World Heritage Site (&Beyond, 2018a; Martindale & Naylor, 2017). The Mun-Ya-Wana Conservancy Controllers Association manage the whole reserve (Martindale & Naylor, 2017). In accordance with the NEMPA, Biodiversity Stewardship Agreements have been negotiated between Ezemvelo KZN Wildlife and the landowners of the Mun-Ya-Wana Conservancy, where the latter has been proclaimed a nature reserve (Martindale & Naylor, 2017). The vision of the conservancy is "To be a world-renowned leader in the practice of biodiversity conservation and protected area management – to be the best privately-run protected area in Africa" (Martindale & Naylor, 2017:51). Figure 6.1 depicts the location of the reserve and community within the province of KwaZulu-Natal.

PGR is run by &Beyond, which is an award-winning luxury travel company specialising in tailor-made tours and safaris in Africa, Asia and South America (&Beyond, 2018a). &Beyond (previously known as Conservation Corporation Africa) has a three-fold vision: care of the land, care of wildlife and care of the people, and has followed a model which shows that "by harnessing international capital through low-impact, high-yield tourism, conservation land could prove its economic viability whilst affording rural communities a meaningful share of the benefits" (&Beyond, 2018a:n.p.).

Regarding the natural environment of the reserve, it contains seven distinct habitats and is home to, among others, the Big Five and 415 bird species (Safari.com, 2018; South African Lodges, 2018). It also contains a portion of the critically endangered sand forest (&Beyond, 2018a).

The number of permanent employees at Phinda is reported as 308 by Rylance and Spenceley (2016). Of these, 52% are from the communities bordering the reserve, and in 2013, indirect employment opportunities benefited another 3 000 residents. Another report (&Beyond, 2015) states that approximately 200 out of the 308 employees are from local communities, and an additional 60 local community members are contract staff involved in indirect employment. The figures for August 2019 indicate that 181 out of 315 Phinda employees come from the surrounding communities. Out of these, 47 (14.92%) are from Mnqobokazi[21]. Local residents also benefit from contract employment such as canteen catering, security, staff transportation, construction and maintenance (Rylance & Spenceley,

21. Statistics provided by Ms Ilze Olver (HR Manager, Phinda) via email on 31 August 2019.

2016), cultural entertainment, community tours, bush clearing and alien plant control (Rylance & Spenceley, 2014).

Figure 6.1: Phinda Game Reserve and Mnqobokazi within KwaZulu-Natal province

Figure 6.2 depicts the reserve's position relative to Mnqobokazi, the community in which the research was conducted.

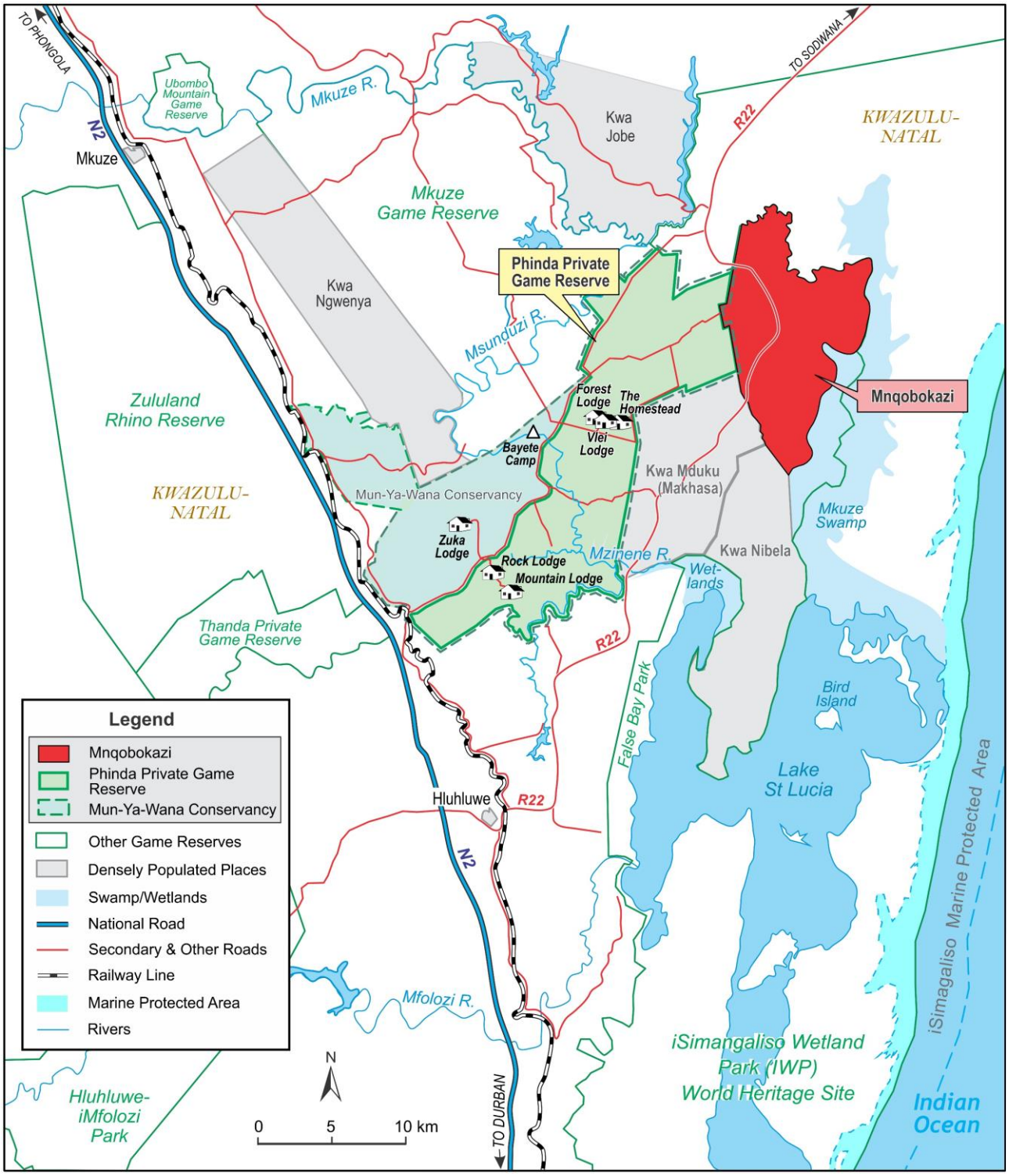


Figure 6.2: Phinda Game Reserve and Mnqobokazi

Due to the commitment to work with the communities surrounding Phinda, the Rural Investment Fund was started in 1992 (Varty, 2008). Today it is known as Africa Foundation, a non-governmental organisation (NGO), affiliated to &Beyond. Funded by Africa Foundation UK and Africa Foundation USA, its purpose is to uplift, provide skills training and empower rural communities near key conservation areas (Africa Foundation, 2018). The foundation concentrates on fighting poverty through rural development in communities around &Beyond's lodges and reserves, but via projects that are identified

and championed by the community. This approach aids long-term sustainability of the projects within the communities (Africa Foundation, 2018; &Beyond, 2018a). Guests can visit these projects and often become ambassadors and donors once they have returned home (Varty, 2008).

Education is a major thrust for &Beyond and Africa Foundation, for example, constructing classrooms and other schooling infrastructure such as media centres, renovating schools, and providing bursaries and computer training (Africa Foundation, 2017). The environment and conservation is another thrust, where &Beyond and Africa Foundation take school children from neighbouring communities on game drives and provide conservation lessons (Africa Foundation, 2018). Africa Foundation also hold debates on conservation related matters at local high schools (Muzirambi, 2017). Health care and clean water constitute another focus, for example, building and supporting existing clinics; installing water tanks, boreholes and enviroloos; training and support on nutrition and HIV/Aids issues; and supporting home-based care for orphans, vulnerable children and the elderly (Africa Foundation, 2017). Finally, small business development receives attention, for example, linking existing enterprises to needs in the lodges, such as building, laundry and supplying crafts and fresh produce (Africa Foundation, 2011).

### 6.2.2 Tourist accommodation

Phinda focuses on high-end ecotourism, offering guests several options of five-star lodges or higher, namely Forest Lodge, Mountain Lodge, Rock Lodge, Vlei Lodge, Zuka Lodge, The Homestead and Bayete Camp. Each lodge is unique, containing suites that are separated from each other, providing exclusivity and privacy. The Homestead is a private safari villa booked by one party at a time, but is currently being rebuilt due to a fire (Hluhluwe Reservations, 2018). Depending on the lodge, guests are treated to spectacular views of plains, valleys, waterholes, mountains or forest. Accommodation is all-inclusive, including activities such as game drives, nature walks (Safari.com, 2018) and visits to the communities. Bookings can be made through &Beyond or other tour operators.

### 6.2.3 Local community

Phinda shares a fence with the Mnqobokazi and Makhasa (also known as Mduku) communities, while another community, Nibela is close by, bordering on the former two communities (Figure 6.2). Since both Mnqobokhazi and Makhasa border the reserve, it was left to the discretion of reserve management to determine in which community the research would be conducted. Mnqobokazi was chosen since it is more under-researched than Makhasa. Mnqobokazi shares its western boundary with Phinda; its northern and eastern boundaries with iSimangaliso Wetland Park; and another part of its western boundary with Mkuze Game Reserve.

The predominantly Zulu speaking Mnqobokazi community falls within the Umkhanyakude District Municipality in northern KwaZulu-Natal. This district contains six local municipalities, one of which is the

Big 5 Hlabisa Local Municipality. Within the north-eastern part of the latter, Makhasa, Mnqobokazi and Nibela form three fairly densely populated rural traditional communities (Executive Department IDP/PMS Section, 2017). The municipal area has 13 wards under the Big 5 Hlabisa Local Municipality. Mnqobokazi mostly falls within Ward 01, and contains six sub-wards (Executive Department IDP/PMS Section, 2017). The communities surrounding Phinda are administered by the Ingonyama Trust Board.[22]

Mnqobokazi was originally part of the Big 5 False Bay Municipality (which had five wards). However, in 2016, this municipality merged with the Hlabisa Local Municipality (with eight wards) to form the larger Big 5 Hlabisa Local Municipality. For statistics specific to Mnqobokazi, the following information is taken from the original website of the Big 5 False Bay Municipality (Yes Media CC, 2018). The population of this municipality (consisting of five wards) is 35 258, with 7 998 households (Stats SA, 2012). While Mnqobokazi is the least densely populated rural community, it is also the largest in size (Executive Department IDP/PMS Section, 2017). It has a population density of above 150 people per square kilometre (Executive Department IDP/PMS Section, 2017) with a population of 11 199[23]. Of the homes in this municipality, 79.6% are formal dwellings. The majority of the population range in age from 15 to 64 (58%), with 37.5% being under the age of 15. Regarding the level of education, 26% have no schooling, 24.4% hold matric, and 5% have had higher education. The unemployment rate is 26.5% and the youth unemployment rate (ages 15 to 34) is 31.6% (Stats SA, 2012). The average annual household income across the wider Umkhanyakude District is R14 600 (Wazimap, 2011b).

Since 1994, power and responsibilities have been shared between the traditional leadership structures and local government. The inkosi (chief) is responsible for allocating communal land to households, while a government councillor elected by the community provides the link between the municipal and provincial government (Burlando & Dahlberg, 2014; Dahlberg & Burlando, 2009).

Mnqobokazi residents rely predominantly on subsistence and small-scale commercial farming, small businesses, child grants, pensions, salaries from government positions (Burlando & Dahlberg, 2014; Dahlberg & Burlando, 2009) and income from tourism-related employment (&Beyond, 2015). According to the recent Integrated Development Plan, Mnqobokazi has the highest agricultural potential of the Big 5 Hlabisa area, with residents cultivating pineapples, sweet potatoes, sugar cane, sugar beans; growing timber plantations; and harvesting essential oils (Executive Department IDP/PMS Section, 2017). Another source of income is the gathering of natural resources such as reeds, papyrus and ilala palm (mainly by women) from the wetland for, among others, building, thatching and crafts (Burlando & Dahlberg, 2014).

22. Personal communication with Mr Bheki Ntuli (Regional Manager, Africa Foundation) via email on 28 August 2019.
23. Personal communication with Magakwe Kgope (Statistical Collection and Outreach Branch, Stats SA) via email on 2 August 2018.

Since Phinda's inception, a significant amount of land that had been taken from the community in the 1900s has been returned to its original owners following land claims. Phinda now partners with the Makhasa and Mnqobokazi communities to rent the land from the communities. The communities involved have chosen this route as they believe the best financial return is to keep the land under conservation (&Beyond, 2018a). The beneficiaries of the land claim are represented by legal entities, namely the Makhasa Community Trust and the Qhubekani Mnqobokazi Community Trust. The Makhasa lease was signed in 2007, and the Mnqobokazi lease in 2008 (&Beyond, 2015). The leases are for 36 years (with option to renew for another 36) and are registered against the title deeds (Martindale & Naylor, 2017). Rental is paid annually to the two trusts, with approximately USD370 000 paid out per annum between 2007 and 2013 (Rylance & Spenceley, 2016). The following benefits are also linked to the successful land claims: employment preference, skills transfer, capacity building, business opportunities and community-based projects (Martindale & Naylor, 2017).

Phinda is currently leasing five properties from the Qhubekani Mnqobokazi Community Trust. These total 4 966 ha and all form part of the Mun-Ya-Wana Conservancy (Martindale & Naylor, 2017).

Some of the specific projects currently benefiting Mnqobokazi residents are detailed below. Most of these are partnerships between &Beyond, Africa Foundation and the local community. In some cases, outside companies or NGOs also form part of the partnership. In addition, interested tourists are taken to visit some of these projects, and often become donors.

- The Environmental Education Programme (EEP) takes local school children from Nkomo Primary School into the reserve. Through the EEP, trust members and tribal authority leaders are also taken into Phinda for visits, and have been invited to witness rhino dehorning.
- Nkomo Primary School in Mnqobokazi began when a community member started teaching the children under some trees. This community member became the local champion for the project. Nkomo Primary School has now been declared a full-service school, which enables them to assist special-needs children. These children used to have to travel to the Khulani Special Needs School in Makhasa, which is 24 km away from Mnqobokazi. Many families could not afford the transportation.
- The NOAH project (Nurturing Orphans of Aids for Humanity) is run from Nkomo Primary School. It provides aftercare facilities for orphans and vulnerable children (OVC). Children are provided with a meal, a place to do homework, as well as support in filling out documentation to receive child grants.
- The Community Leaders Education Fund (CLEF) bursary programme awards bursaries for tertiary education to deserving scholars. These scholars are then required to give back to the community during their holidays.
- The Stars in Training programme provides vocational training to community members.
- Simunye Créche received furniture and equipment.

- The Nukamkhonto community, a sub-ward within Mnqobokazi, received a borehole.
- Bheki Nkomo Créche had renovations and received furniture.
- Sikhulangothando Créche received double classrooms and five enviroloos. Work on the kitchen and dining hall is currently in progress.
- Africa Foundation is currently funding a new high school for Mnqobokazi.

(Sources: &Beyond, 2018b; Africa Foundation, 2018; Muzirambi, 2017; [24]).

## 6.2.4 History

### *6.2.4.1 History of community*

Northern KwaZulu-Natal has been home to indigenous people for centuries, and was dominated by the Zulu people in the late 18th century (Burgoyne & Kelso, 2014). The Mnqobokasi community trace their roots back approximately 200 years, with oral history tracing the chiefly family, descendants of which still rule today (Dahlberg, 2001). Chief Msongelwa became chief of the Mnqobokazi tribe in 1941. Two of his sons were vying for the chieftancy, and after indecision on the part of the chief, and the chief's request to the Pretoria magistrate that he make the decision, Msongelwa eventually selected Zwelakhe Albert Ngwane as successor. In 1991, following Msongelwa's death, Zwelakhe succeeded him, but this was contested by the brother, Bhekuyise (Nienaber, 1996). The current chief is Chief Sabelo Ngwane.[25]
In terms of the land, In the mid-twentieth century, commercial farmers took over what had been the west part of the Mnqobokazi land (Dahlberg, 2001). The community lost sections of their land in this process. While Phinda was only created years later and did not form part of this original land expropriation, &Beyond and Africa Foundation have been instrumental in facilitating the more recent successful land claims and land restitution.

### *6.2.4.2 History of reserve*

The &Beyond vision started with Londolozi, a game farm owned by the Varty family. Londolozi lies within the Sabi Sands Private Game Reserve in the Greater Kruger National Park, and was the place where many tough lessons were learned regarding the running of a safari business (Varty, 2008). Years later, once Londolozi had grown into a successful prize-winning private game reserve, the Varty brothers turned their attention towards Phinda "to build a game reserve like Londolozi in Zululand" (Varty, 2008:81). &Beyond (then known as Conservation Corporation Africa) purchased the degraded farmland in 1991 to form Phinda Resource Reserve (&Beyond, 2018a). In Zulu, Phinda means 'return', a fitting name due to the rehabilitation of overgrazed agricultural land and reintroduction of species endemic to the region

24. Personal communication with Mr Bheki Ntuli (Regional Manager, Africa Foundation) via email on 28 August 2019 and with Mr Isaac Tembe (Africa Head, Methodology and M & E, Africa Foundation) via skype on 2 August 2019.
25. Personal communication with Mr Bheki Ntuli (Regional Manager, Africa Foundation) via email on 28 August 2019.

(&Beyond, 2018a). The task of restocking the area with game was the largest relocation of wildlife ever undertaken in South Africa up to that point (Varty, 2008).

Phinda Resource Reserve was later named 'Phinda Private Game Reserve' and grew from 13 000 ha to 28 000 ha of prime wilderness land. For those involved it was a tough journey fraught with obstacles, particularly funding challenges (Varty, 2008). Today, however, it is an award-winning private game reserve. By showing that damaged agricultural land could be turned back into vibrant functional wildlife habitats, and by returning land to dispossessed communities, Phinda has, over the course of the last 25 years, aimed to live out its commitment to care for the land, people and wildlife (&Beyond, 2018a).

## 6.3 Results and interpretation

Section 3.10 in Chapter 3 provides an orientation to the three case study chapters. Table 6.1 below reminds the reader of pertinent information regarding the participants in Case Study 3 and the data collection methods used. It is followed by the presentation of results and data analysis for each question that was put to participants (Sections 6.3.1 to 6.3.9). Questions 1, 6 and the mapping activity are discussed together in Section 6.3.1 as they all relate to C1's knowledge of the reserve. Thereafter, the questions are discussed in the order in which they were asked, since they progress from the more general to the more specific. Section 6.3.10 contains some cross-question analyses, followed by Section 6.4, which concludes the chapter. Case Study 3 is abbreviated as PGR/M (for Phinda Private Game Reserve/Mnqobokazi community).

Table 6.1: Case Study 3 participants and data collection

| | **C1** | | | **C2** |
|---|---|---|---|---|
| | **FGI 1** | **FGI 2** | **FGI 1 & 2** | |
| **Number** | 12 | 12 | 24 | 5 |
| **Gender** | 7 F, 5 M | 5 F, 7 M | 12 F, 12 M | 5 M |
| **Method** | FGI & mapping | | NGT & Q14-10 via group interview | **II** |
| **Data collected on:** | 7 August 2017 | | | 8-9 August 2017 & 1 September 2017 |

### 6.3.1 Knowledge and experience of nature reserve

Three groups of questions were used to investigate C1 participants' knowledge and experience of the reserve and are therefore all included in Section 6.3.1. Table 6.2 provides an orientation. C2 did not answer these two questions or do the mapping activity, as the purpose of these was to determine community members' knowledge and experience of the reserve.

Table 6.2: Orientation to Questions 1, 6 and mapping: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q1 / K=Knowledge | Y | N | What do you know about this nature reserve? What is inside this reserve? What can you do in there? | FGI | Section 6.3.1.1 |
| Q6 / E=Experience | Y | N | Who of you have been into the reserve? What do you go in for? What did you think of your experience? | FGI | Section 6.3.1.2 |
| Q Drawings / Dr=Drawings | Y | N | In a group, draw a map of the reserve and your community. | Mapping | Section 6.3.1.3 |
| **Research Objective** | | | 2 | | |

### *6.3.1.1. Knowledge of nature reserve*

#### *A. Overview: Knowledge of nature reserve*

Table 6.3 depicts the results for Q1 on 'Knowledge of nature reserve'. When combining the results of C1 Focus Groups 1 and 2, the codes containing the highest number of quotes were 'Provides jobs', 'Animals' and 'Supports local community'. Participants' knowledge of Phinda as a provider of jobs and as a support to the community was evident here. It is notable that neither of the negative codes, namely 'Lack of information/access regarding reserve' and 'Lack of resource access' were mentioned. Focus Group 2 provided almost double the number of quotes compared to Focus Group 1.

Table 6.3: Code frequencies for 'Q1 Knowledge': PGR/M

| | C1 | | |
|---|---|---|---|
| **CODE (K=Knowledge) (WCPD=What Can People Do)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| K: Accommodation | 0 | 2 | 2 |
| K: Animals | 3 | 2 | 5 |
| K: Local community use reserve for ... | 0 | 1 | 1 |
| K: Plants | 1 | 1 | 2 |
| K: Provides jobs | 2 | 4 | 6 |
| K: Supports local community | 1 | 3 | 4 |
| K: Tourism | 1 | 2 | 3 |
| K: WCPD: Conferences and functions | 1 | 2 | 3 |
| K: WCPD: Relax | 1 | 1 | 2 |
| K: WCPD: See animals | 1 | 1 | 2 |
| **TOTALS** | 11 | 19 | **30** |

#### *B. Specifics: Knowledge of nature reserve*

##### *(a) Provides jobs*

The code with the most quotes was 'Provides jobs' (six quotes). Five of these quotes alluded to the reserve providing job opportunities, while the sixth concerned going to the reserve for job interviews. One participant hinted at the range of jobs – looking after the reserve and animals, and other jobs (P353,

40:40). One alluded to jobs for different age groups (P356, 24:24), and another to an agreement to employ approximately a two-thirds majority from the local communities (an ideal which is starting to be realised): *"As a leader of the community trust, which is working closely with Phinda, when Phinda arrived in 1989 … they had an agreement with the tribal authority that they will be using this land … Things were tough then but after that when the land claims began, things got better and there are quite a number of benefits that the community is now directly benefiting from"* (P356, 30:30). While this participant, as a member of the trust, would be receiving rental payments from Phinda, he does refer to a 'number of benefits' for the community as a whole. The quote also makes reference to the improvement of life for the community, following Phinda's inception.

***(b) Animals and plants***

Two of the five quotes under this code refer to the presence of animals within the reserve (P353, 24:24; P353, 25:25), while the other three refer to the Big Five or cats being there (P353, 21:21; P356, 36:36; P356, 42:42). Coupled with awareness of nature are two quotes regarding plants. One mentions the presence of indigenous trees and plants (P356, 48:48), while another refers to *"indigenous plants that are used … by traditional healers for medicine"* (P353, 32:32).

***(c) Phinda supports community***

The mention of employment (see above) is already indicative of Phinda's support of the community. Further to that, the four quotes under 'Supports local community' build on this, but relate to other support. Mention was made of bursaries (P356, 24:24), development, meat and tourist's donations:'

> *"What I know about the Phinda Game Reserve is that it provides a lot of development in the community … and then … providing some services, especially developing schools"* (P356, 24:24).
>
> *"When we've got some functions or ceremonies and we do not have much … we go to Phinda and Phinda provide some food in the form of meat and all that stuff"* (P353, 37:37).
>
> *"[the tourists] do not end inside the game reserve but also … visit the communities and then if they see possibilities for development, then they provide those services [through] … Africa Foundation …"* (P356, 35:35).

***(d) What can people do there?***

Across all the 'WCPD' codes ('What can people do' within the reserve), seven quotes emerge, with references to: 'Conferences and functions' (3) such as weddings (P353, 53:57), conferences (P356, 55:55) or going for a meal (P356, 58:58); 'See animals' (2), where both participants mentioned game drives (P353, 44:44; P356, 51:51); and 'Relax' (2). For the latter, mention was made of visiting for leisure (P356, 53:53) and *"They came for just relaxation of the game reserve and nature and to admire the natural beauty"* (P353:51:51). There is no marked difference between the responses of Focus Group 1 and 2.

***(e) Other***

Three responses coded under 'Tourism' also show an awareness of the scale of the industry, referring to *"many guests … come and see the nature"* (P353, 41:41); and *"Phinda does not only conserve nature but they also provide the hospitality industry which invites a lot of guests into the game reserve"* (P356, 35:35). This awareness also comes across under the code 'Accommodation' where lodges are mentioned (P356, 43:43; P356, 47:47). The only quote emerging under use of the reserve is that *"we can go and learn about nature conservation"* (P356, 30:30). The theme of environmental education is strong in this case study and this is the first mention thereof.

'Negative' knowledge codes are conspicuous by their absence. There are no quotes under 'Lack of information/access' and 'Lack of access to natural resources' – codes which were used in the previous two case studies. In fact, natural resources do not feature – neither in terms of access nor lack of access.

***C. Summary: Knowledge of nature reserve***

Participants have an average to good knowledge of the reserve. There is awareness of Phinda as a job creator and supporter of the community via various benefits flowing in. Two participants specifically acknowledged that things are better now in terms of employment and other benefits respectively. There is awareness of the animals within the reserve and the uses of the reserve for different functions, conferences, relaxation, game drives and enjoyment of nature. Participants know about tourism and that lodges are present. Natural resources do not feature in the context of access or lack of access to them. In addition, no negative codes were used, such as 'Lack of information/access'.

### *6.3.1.2 Experience of nature reserve*

***A. Overview: Experience of nature reserve***

The data resulting from this question (Q6) are shown in Table 6.4. While Focus Group 2 said more, in terms of composition or character of the groups, there were no major differences. Leaders were spread across both groups, as were males and females, and the atmosphere with both groups was positive and jovial, with regular laughter. The data are hence analysed together.

Table 6.4: Code frequencies for 'Q6 Experience': PGR/M

| | C1 | | |
|---|---|---|---|
| **CODE (EX=Experience)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
| EX: Feelings expressed | 7 | 5 | 12 |
| EX: For: Animals | 2 | 3 | 5 |
| EX: For: Parties/functions | 0 | 3 | 3 |
| EX: For: Work | 4 | 6 | 10 |
| EX: Learn | 2 | 6 | 8 |
| **TOTALS** | 15 | 23 | **38** |

The most used code was the expression of different feelings (12 quotes), followed by going into the reserve for work (ten quotes) and to learn (eight). The remaining quotes related to their experiences of going in for animals (five) and parties/functions (three).

### *B. Specifics: Experience of nature reserve*

#### *(a) Who has been in and how often?*

In each focus group, the researcher asked who of them had entered the reserve before. In Focus Group 1, 7 out of the 12 participants had entered the reserve (P353, 211:211), while in Focus Group 2, 10 out of 12 had gone in (P356, 182:182). This amounts to just over 70%. In terms of regularity of visits, seven had entered regularly for work (full time or contract). The others had visited for the Eco-Schools Programme (formally known as the Environmental Education Programme); as part of the EEP which reaches out to the community leadership (rhino dehorning, game drives, meals, etc); as part of a Zulu dance group; for training; as part of an educator's trip; or for the Robin James Award[26] ceremony. Some participants had been in for a few different reasons. None though reported visiting independently with their families, as tourists.

#### *(b) Specific experiences*

Ten quotes allude to participants whose experience of the reserve has been due to them entering it for **employment** purposes. Some have entered many times for permanent work, contracts, odd jobs, to give perfomances, etc.

The code '**Learn**' was allocated to eight quotes. Five of them are with regard to the **learning programme for which they entered the reserve**, namely the Eco-Schools programme (P356, 231:231; 195:195) which takes school children on game drives; the Disney Team programme (P356, 222:222; 236:236) which takes educators from surrounding municipalities in to learn about nature conservation inside PGR; and the programme working with the community leadership: *"We [a group with headman] were also taken to see the process of placement of trackers for rhino drive …"* (P356, 188:188).

Three quotes allude to **what was learnt**. One participant learnt how to behave when encountering a dangerous animal (P353, 249:249), while the other *"[had] a good experience in terms of learning about different animals which helped her to focus in terms of listening to different music by different birds, and to have to spot different animals in terms of their prints and tracks"* (P356, 263:263). An elderly participant stated that *"I would like one day to go to Phinda. I've never been to Phinda but I can testify that from my grandchildren, who have been there, when they come back they have better knowledge. They can point out in pictures that they have seen – this and that in there, so it's a good experience from my children's eyes as well"* (P353, 256:256).

26. This award, created by Africa Foundation, has been offered annually since 2017 to an individual who has devoted his/her life to assisting and empowering others (&Beyond, 2018a).

The five quotes mentioning that their experience related to visiting Phinda for **animals** all mention going in for game drives. Three of them relate to game drives with schools (P353, 227:227; 235:235 and P356, 223:223), one to going on a game drive given for the headmistress's birthday (P356, 234:234) and the other came from the local headman: *"As the headman I have been in more than ten times, and we were taken for game driving"* (P356, 188:188). Entering for **parties and functions** was due to one participant being a member of the community trust (P356, 216:216), and two coming for the Robin James Award ceremony (P356, 223:225; 236:236).

***(c) Feelings expressed***

The 'Feelings expressed' were in response to being asked how they felt when they visited the reserve. Apart from one quote, participants were very positive regarding their experiences. Even if fear was mentioned, it was in the context of overcoming the fear and either expressing amazement or that they had become accustomed to the presence of the animals (particularly those working in the reserve).

In terms of fear, a participant mentioned *"I was so nervous, it was on my first day – it was not tremendous … there is something that was about to happen … There was a leopard that was under the tree … [the leopard is] a stranger to me, and it came gradually while we didn't see it coming, but the one … with binoculars was able to see … so he told the driver that we must move quickly … So, I was so nervous, the whole day I was so scared"* (P353, 265:267). Four expressed that they had felt fear, but were now accustomed to the animals. Two commented on being trained how to respond in certain situations (P353, 274:274; 275:275), while others had become used to the animals (P356, 249:253). Two quotes mentioned fear coupled with exhilaration at the experience:

> *"For the first time I was so scared, but when I'm leaving the park that day … something strange happened to me. You know … maybe the game reserve – it is able to re-boost our mind. I don't know how can I say this, but I came back fresh like a new orange from the farm"* (P353, 269:269).

> *"… the first time you're so afraid, but when you get there and you get to interact with nature, you feel okay. But as for now, I'm still feeling like I'm a highly distinguished community member [laughter], because going in there … I got a chance to game drive free of charge … And, you know, I saw a leopard. You can't see a leopard anywhere, not anytime …"* (P356, 265:267).

Her exuberance at the experience was contagious and all the participants laughed and clapped at her answer.

Two participants mentioned myths that had been dispelled during their visit, and these emphasise the power of visiting the reserve:

> *"He's mentioning some myths that … when you see a lion, somebody will die definitely, so that has also changed the entire experience of his life, knowing that he can go there without any harm and then come back to just view animals … because there were some superstitious beliefs attached – that when you see those animals you are likely to be dead"* (P353, 253:253).

> *"If I can get a second chance, I will grab it with both hands. I used to talk about, the lion for example, without ever knowing in person or physically. So, now that I know – [it] feels good. At first I was very frightened of the animals because I have that myth that the animals, like lions, they will just kill you, but then the second time going there I was very relaxed and then I did enjoy [it]"* (P356, 259:261).

One participant talked about the *"good experience"* of *"physically seeing animals like lions which they only see … on TV or in paper or on photos"* (P353, 251:251); while two talked about aspects learnt during the visit, with one being amazed at the knowledge of the local guides (P353, 260:262) and the other having learnt about people skills: *"I had a great experience, particularly … in terms of leadership, I have acquired a lot of skills from how they treat people …, how they treat their guests in terms of welcoming everybody … So they have given me … skills in management, how to liaise with people ... I think how it is now in [Nkomo Primary] school, for example, is through what we have acquired from that game reserve"* (P356, 245:245).

***C. Summary: Experience of nature reserve***

Seventeen out of 24 participants had entered the reserve, either for work, to take part in various programmes or for the Robin James Award ceremony. Due to the various programmes, several have had learning experiences regarding conservation and animals. The range of positive feelings expressed demonstrate the power of a visit to PGR. Although fear was mentioned often, participants report life-changing experiences, fears and myths dispelled, and skills learnt. It is evident that Phinda have a strong focus on taking local leaders, trust members, educators and school children into the reserve. However, no one had entered as a traditional tourist with his/her own family – all had entered for work or as part of a programme.

### *6.3.1.3 Mapping*

Due to the nature of this question being quite different, the overview and the specifics are dealt with together.

***A. Overview and B. Specifics: Mapping***

The maps drawn by the two focus groups are shown in Figures 6.3 and 6.4. The two maps were similar in the sense of showing minimal detail on PGR (P497, @1646-@728; P498, @969-@5) and average detail for the Mnqobokazi community (P497, @970-@326; P498, @1230-@14). Focus Group 1 was far more artistic in their rendering of the reserve than for that of their community, but their community had more detail in terms of place names, roads, rivers, etc. Focus Group 2 adopted an artistic approach throughout, using more pictures than words for both the reserve and community. However, the

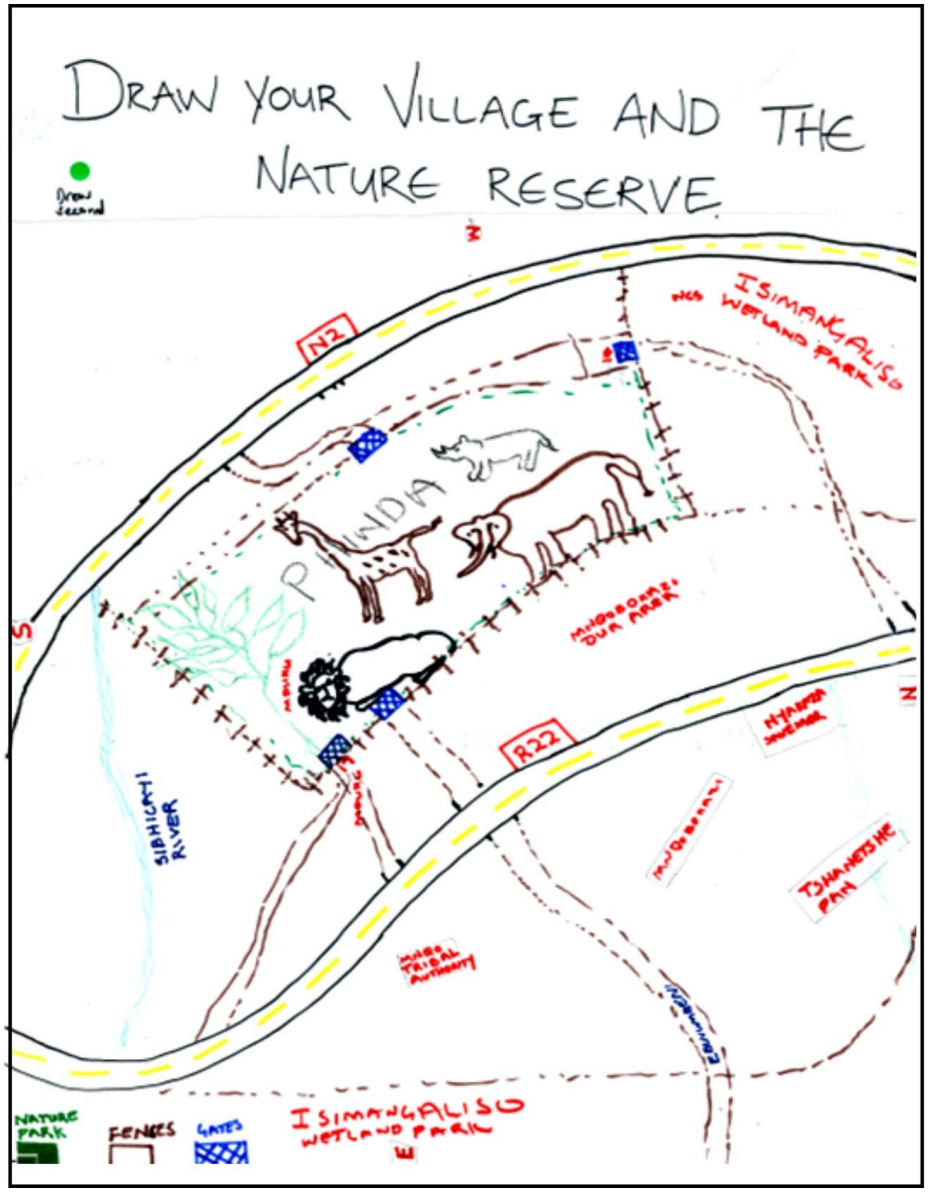



Figure 6.3: Map drawn by Focus Group 1: PGR/M

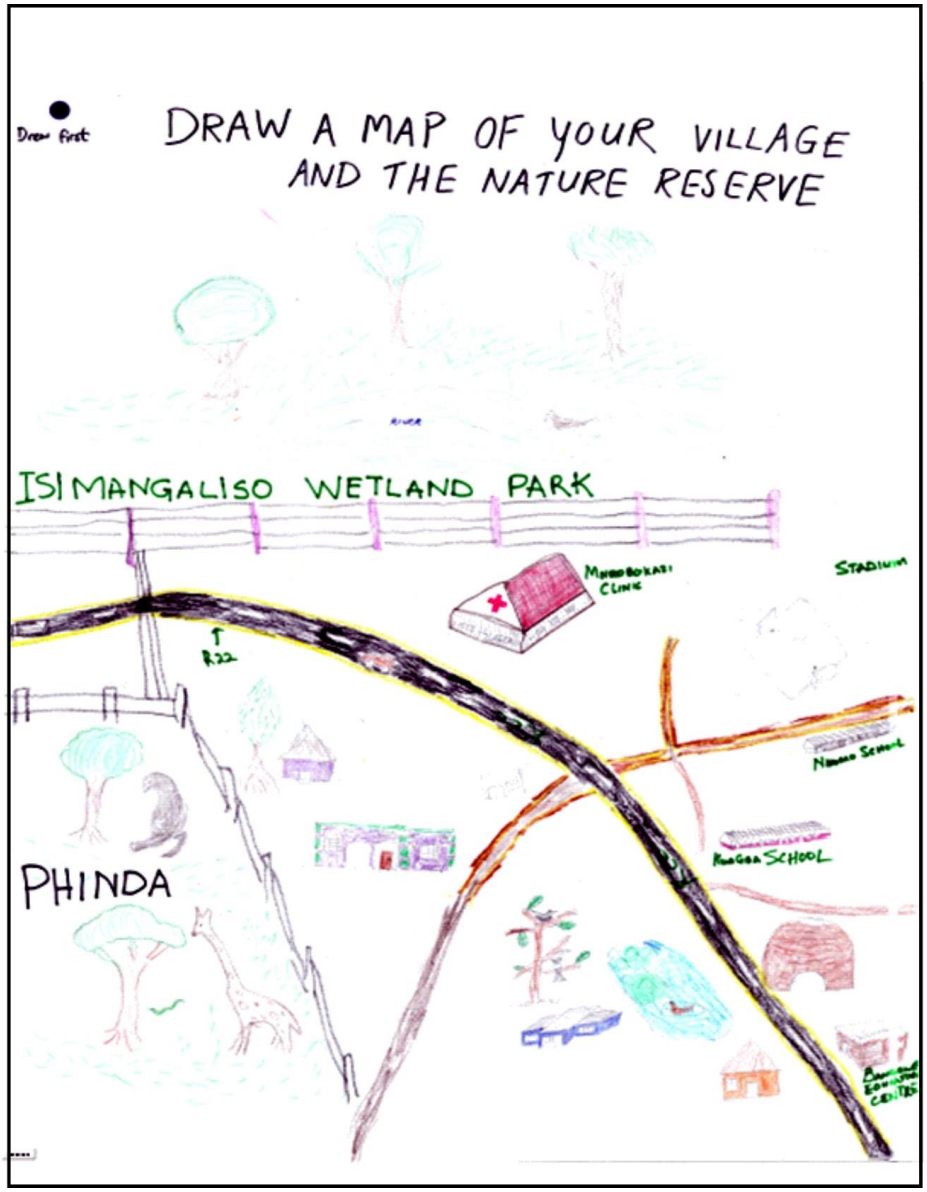



Figure 6.4: Map drawn by Focus Group 2: PGR/M

community still had more detail in terms of labels, landmarks, roads, etc. Both maps showed plants and animals for Phinda, as well as a boundary/fence, while Focus Group 1 added some gates. Apart from these, there was no further detail within PGR (such as roads, landmarks, lodges). This is rather surprising since most participants have entered Phinda. Both maps also indicated iSimangaliso Wetland Park, with both focus groups writing the name out, but Focus Group 2 also drew trees, water and a water bird.

For the area in which the community live, both groups indicated landmarks. Focus Group 1 indicated the Tribal Authority offices, Tshanetshe Pan and a shop (P497, @970-@326); while Focus group 2 drew and labelled a clinic, stadium, two schools and an education centre (P498, @1230-@14).

***C. Summary: Mapping***

The overall impression is that the participants were unaware of detail related to the reserve, other than the presence of a boundary, animals and plants. Both groups showed more detail for Mnqobokazi. As mentioned in Section 6.3.1.2 above, 70% of participants have entered PGR, which makes the limited detail for Phinda surprising.

Section 6.3.1 contributes towards answering Research Objective 2.

## 6.3.2 Relationship between community and protected area

Table 6.5: Orientation to Question 2-1: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q2-1 / R=Relationship | Y | | Tell me about the relationship between you and the nature reserve. How do you feel about living near the reserve? | FGI |
| | | Y | Tell me about your perceptions of the relationship between the local community and the nature reserve. | II |
| **Research Objective** | | | 3 | |

***A. Overview: Relationship between community and protected area***

Table 6.6 presents the data for this question. More quotes arose from C2 for this question (C1:34; C2:49). The code used most was 'Actions taken/planned by reserve' and all 23 quotes here were from C2. The second most common code was 'Relationship is fair to good', with seven quotes from C1 and 14 from C2, which is largely positive. This was followed by 'References to poaching' (C1:3; C2:11). It is noteworthy that seven quotes (all from C1) related to appreciation of reserve/resources, and 12 from C1 to appreciation of actions taken by the reserve.

Table 6.6: Code frequencies for 'Q2-1 Relationship': PGR/M

| CODE (R=Relationship) | FOCUS GROUP 1 | FOCUS GROUP 2 | C1 FOCUS GROUP 1 & 2 | C2 INDIVIDUAL INTERVIEWS |
|---|---|---|---|---|
| R: Actions taken/planned by reserve | 0 | 0 | 0 | 23 |
| R: Afraid of animals | 1 | 1 | 2 | 0 |
| R: Animals seen as food | 1 | 0 | 1 | 1 |
| R: Appreciate actions taken by reserve | 7 | 5 | 12 | 0 |
| R: Appreciate reserve/resources | 4 | 3 | 7 | 0 |
| R: Desire better relationship with reserve/local community | 1 | 0 | 1 | 0 |
| R: Lack of knowledge/information/access | 0 | 0 | 0 | 0 |
| R: References to other environmental concerns | 1 | 0 | 1 | 0 |
| R: References to poaching | 0 | 3 | 3 | 11 |
| R: Relationship is fair to good | 3 | 4 | 7 | 14 |
| **TOTALS** | 18 | 16 | **34** | **49** |

## *B. Specifics: Relationship between community and protected area*

### *(a) Actions taken/planned by reserve*

All 23 quotes here came from C2. It is evident that many positive initiatives benefiting the community are underway. While the Mnqobokazi participants were very positive, they mention specific actions far less and in less detail. What does emerge from C1 (analysed later under 'Appreciate actions taken by reserve') falls mainly under educational – schools built, taking children into the reserve and the exchange programme. The other aspect was general care with phrases like 'they come through for us', 'they help us' and donating meat for community functions. The lack of mention of the other actions taking place suggests that communication from the reserve regarding other programmes and projects could increase positivity even further.

The researcher has categorised the actions mentioned by C2 into descending order in terms of how many times they were mentioned: employment; projects that improve community wellbeing; environmental education; the need for a community development plan; paying rental to trusts; working with the trusts; strong communication networks; having a different philosophy; and access to sites of spiritual importance. The only action that is being 'planned by reserve' (i.e. not currently in place) is the community development plan mentioned by one of the participants. These categories are indicated in bold within the text.

There were five mentions of **employment** by C2. Participants alluded to the fact that this employment has helped to create a good example and positive perception (P355, 22:22; 24:24). Two participants mentioned how many people in the community have been influenced through job provision:

*"the majority of the people, I would think maybe 90/92%, comes from the communities"* (P352, 44:44).

*"… at least 60% are coming from these … five communities, Mduku, Nibela, Mnqobokasi, Kwa Jobe, Kwa Ngwenya and … [the] 40% that is left it's [when we] need some specialised skills for a particular job and … you don't find somebody there, that's when you outsource, especially the senior positions. … I believe it's more than 60% now, because most of the people who's been working at Phinda have been promoted. Some of them from being waiters, becoming even trackers, becoming even rangers now … So, we have people that have started there [and] moved up the ladder. I'll say probably 70%, … are coming from these communities and when there's a position that's being advertised, we make sure that we communicate that to the relevant stakeholders like those communities, especially the trust"* (P350, 38:38).

Statistics provided in August 2019 indicate that the percentage of local community members employed was 57.46%, with 14.92% coming from Mnqobokazi[27].

Regarding **projects that improve community well-being**, most quotes list specific projects, except for the quote below, which lists several areas of action: *"[Over] the past 25 years, … our projects [ranging] from education, primary healthcare, income generating activities [have been] identified based on a study that was done when we started to work with these communities. So, out of all the consultation [with] all the communities, it was clear that people are very concerned about the schools, because they believe that education is the way … towards a bright future"* (P350, 110:110). In keeping with this quote, three of the other quotes concern education related initiatives. Two mention the bursary scheme from Africa Foundation (P355, 22:22; 24:24) and the other the building of schools by Africa Foundation (P355, 24:24). The final quote relates to clinics: *"Because if I'm not mistaken … Mduku Clinic is one of the first projects that were done. Before that clinic you would have to walk – I don't know how many kilometres – from Mduku to Nibela to go to Ezimpondweni clinic. So that helped the communities a lot and … that is how the relationship started for the company being involved with the communities"* (P352, 40:40). While the Mnqobokasi community does have a clinic built by the government, the Mduku Clinic was built by Africa Foundation in 1995 (&Beyond, 2018a).

Four quotes alluded to **environmental education**. One participant referred to various workshops being held in the communities to *"… keep the communities going and understand what we're doing inside Phinda"* (P355, 18:18). He referred to workshops on environmental impacts, use of poisons, alien plants, etc. The other quotes refer to the EEP for school children, and one mentions the EEP for the elders and the trust members, where they are treated as guests and exposed to rhino dehorning. Two participants talked about these programmes in the context of population growth, explaining that the positive effect of benefits flowing from Phinda is being diluted:

*"This is why [referring to the growth in communities] we started a program called 'Environmental Education'… where we are enriching, … we're trying to make people see why we are here and what we are doing, by bringing in kids almost every day to Phinda. We teach them about wildlife …*

27. Statistics provided by Ms Ilze Olver (HR Manager, Phinda) via email on 31 August 2019.

*environment, … and not forgetting about what is good also [for] them. We are not only teaching them about Phinda, Phinda, Phinda. They also need to know about their side … in the communities – what they can do, what they cannot do … it's a win-win situation"* (P355, 22:22).

*"There's the clinics, there's all that stuff, but for me what is key is communication and education. It's changing people's mindsets and behaviours. … The problem is that in these communities, ten years ago the community was half or a quarter of the size. So, the impact that Phinda has now has been diluted, because it's very hard to keep up with the growing population. So, the direct benefits have been diluted. How else do you change people's perception and behaviour? It's only through education. But then it's to make sure that what you do is effective – like doing lots of kids game rides – is definitely a very cost effective way … and the kids have to come in and to physically see. And then the message has got to be right … So, [Mpilonhle[28]] brought in a lot of funds and everyday kids come in, do a game drive and one of our ex-rangers who lives in the community, he's doing it, and the message is right, but it's not enough. And then hopefully we can bring in the elders and the trusts [for] game drives and rhino dehorning. The one we did with Makhasa was a huge success. It was the first time many of them had seen rhino, they touched a rhino. I even got some of them to fly in the helicopter and afterwards they … said it was amazing! So, we'll do that in the next couple of months with the other communities"* (P357, 65:68).

The challenge of a growing population in Mnqobokazi is also mentioned by Burgoyne and Kelso (2014) who explored the perceptions of three rural communities living adjacent to Mkuze Game Reserve. They report that the population grew by more than 20% during the 1990s (equating to an addition of approximately 14 people per square kilometre), and that this could increase pressure on natural resources.

A participant also mentioned the problem that many reserves as well as NGOs do not have a plan; and stressed the importance of creating a **community development plan** with short, medium and long-term goals, allocating resources accordingly, determining a budget, and then being able to measure the impact (P357, 53:57; 68:68). He adds: *"… Now we've got these conservation lessons that we're doing which is great, but it's not addressing the entire spectrum of the community. So, you're targeting kids, but what about the adults? Because the adults will tell you … what about us? We're making the decisions now. They're going to make the decisions in 20 years' time, but you're not going to have rhino in 20 years. These are all the things that have to be built into a plan"* (P357, 57:57). He later continues: *"I do reserve management plans a lot, … but I don't know how to develop a community development plan and it's got to be specific to us, … address all these things, … be effective, it's got to be done now, it's got to be linked with research and future research and, it's got to address all the challenges … the growing community and, perceptions are everything, I've realised"* (P357, 65:65). The final quote on this alludes to both Africa Foundation and PGR needing this plan, and the desire for an outside researcher to assist in this regard (P357, 69:69).

28. Mpilonhle is an NGO based in Mtubatuba, close to IWP, which became involved in the EEP. Its funding and assistance with transport meant that more children could be taken into PGR [Personal communication with Mr Isaac Tembe (Africa Head, Methodology and M & E, Africa Foundation) via email on 2 August 2019].

**Paying rental to trusts** (due to Phinda leasing the land from the communities to use as a game reserve) emerged often in this case study and under this question there were three mentions. All referred to the trust using the money to do something for the community, for example:

> *"… Phinda is paying a rental fee on a … yearly basis. So out of that they then see the positive of Phinda and say 'okay these are our neighbours, so we need to care for that because we've got land there, we've leased that land, they're using it and this is what we getting in return'"* (P350, 36:36).

> *"We pay rentals to the trust … that is direct benefit from us to the communities, … which … changes that perception. Like I said, other people are seeing it another way, but there are people who are benefiting directly from what we are doing"* (P355, 22:22).

Two quotes related to **working with the trusts.** They highlight several challenges, namely that the trusts have had significant help from the reserve, but now need to self-manage; when trustees change, one has to start afresh explaining complex concepts such as inflation and investments; the influence of politics; the significant time investment required by the reserve to assist the community trusts; and that expectations in other communities (apart from Mnqobokasi and Makhasa) are raised, as they see the improved situations in these two communities and desire the same. For example:

> *"I was very involved in both trusts, setting them up, administration … for seven years … We met every month. Set up management accounts, budgets, just to try because the government failed to do that, so we had to do it. But I've taken a bit of a step back now, because … they have to do it themselves, but I still [assist]. For example, they haven't had an AGM, they haven't had audited annual financial statements for the last couple of years and they [had] up until then. Mnqobokasi … should've had an AGM … and voted and either kept the same [trustees], because they're allowed two terms. Makhasa changed, but that was also politics – there was a new nkosi[29] and … he wanted to take control over the trust and obviously the money. And what happens is that you've got now a whole set of new trustees. They don't know the history, you've got to start again … what's inflation, what's bank accounts, what's investment … When [we helped] set up the trusts, they started to receive substantial amounts of money that would just sit in a current account. I would say, 'guys, you've got now R1 million – why don't you invest it?'. … Then you explain to them why you need to invest it. Well, because of inflation. So, what's inflation? So, these are all things that had to be explained. … We brought in people to help invest … So, what's nice is that you build up trust, but it takes time. So, it's challenging … [At] Kwa Ngwenya … they see what's going on here … the Nkosi has got a new house, new cars and it's all money … So, you do also raise expectations of other communities as well, they want the same"* (P357, 51:51).

> *"… we'll always have the trusts and we'll be paying money over … But the first 10 years, we were very hands-on with them and we've kind of let them go because … they've got to manage themselves"* (P357, 69:69).

Another two quotes coded under 'Actions taken/planned by reserve' related to **strong communication networks.** What also emerged is the effort that C2 invest into creating and maintaining these relationships.

> *"I'm mainly referring to … the people who are affiliated with the structures like tribal authorities, because they get to hear a lot about what is happening, the updates and everything comes through*

29. 'Nkosi', also written as 'inkosi' is a Southern African term used to address a chief or a superior (Collins English Dictionary, 2017).

*them. … I think none of the indunas[30] don't know about what we do and don't appreciate it. … Also there will be people who are part of the school governing bodies, because we work with schools, we are part of the clinic projects, … and as committee members, … some who may be part of the trust or who even sits on those trust meetings, like the beneficiaries, because they understand why the trust is here"* (P350, 36:36).

*"We've set up appointments to go and see the tribal authority [at Kwa Jobe] and re-energise the dealings with them, the focus of our relationship, and formally invite the leaders to come and do some work with us. We started with Makhasa. We did a whole dehorning exercise with them, with the tribal authority and the trust … and that went very, very well, and next is Mnqobokasi. [With Mnqobokasi and Makhasa] I can just phone and set up dates. But with the other tribal authorities, we have to go there, talk about it, and then give them an invitation. So, it's a much more formal process. … I've seen the last 10 years a lot more time has to be devoted to interacting with the communities"* (P357, 26:26).

Finally, a participant referred to the reserve allowing **access to ancestral sites and gravesites**, and that there have been numerous requests for this in the past (P357, 91:91); while another participant working for Africa Foundation reflected on the **philosophy** that Phinda was following, which was different to other parks: *"[Phinda] was more keen on bringing the community on board, even for the community to come spend some time here. So, for us … it was a new thing, a new environment, a new culture. … I remember we had the old Parks Board[31] that never helped the communities. As for Phinda … from the beginning we had the right people that were willing to work together with the community … What the company did right – the company did not go to the community and say this is what we are going to do … The strategy was, go out to the community, find out where we can help them"* (P352, 36:40).

***(b) Relationship is fair to good***

After 'Actions taken/planned by reserve', the second most common code was 'Relationship is fair to good' (C1:7; C2:14). No striking differences emerged between Focus Group 1 and 2. This is a noteworthy display of positivity from C1, and should be viewed in conjunction with the 12 quotes from C1 coded under 'Appreciate actions taken by reserve', and the seven quotes under 'Appreciate reserve/resources'.

**The Phinda data (quotes) from C2** revealed that the model is working well. Participants talked about the approach being novel at the time, when few conservation agencies were moving away from fences, fines and brutality to an inclusive community-based approach. Several quotes mentioned the good relationship in the context of direct tangible benefits to communities, which have made a significant difference in their lives. The good relationship with the trusts featured often, as well as the good communication channels. These relationships are evidenced by tangible behaviour, in that Mnqobokazi have expressed their wish to move the land that they rent to iSimangaliso to Phinda. In contrast to the success of this relationship (found in this research), Hansen, Ramasar and Buchanan (2014) report obstructionist relationships between the iSimangaliso Wetland Park Authority and land claims

30. 'Induna', also called 'nduna', is a Zulu word referring to a headman, leader or elder in a community.
31. The 'Parks Board' refers to the previous National Parks Board, which changed to SANParks (South African National Parks) after the end of apartheid rule in 1994, and the resultant re-conceptualisation of the role of this board in the new South Africa (SANParks, 2019).

committees, providing the example of Mnqobokazi members not observing the rules established in their co-management agreement with iSimangaliso, which had not yet been formally signed. A tribal authority representative explained that the community continued to graze cattle within the park because the iSimangaliso Wetland Park Authority was not listening to them (Hansen, Islar & Krause, 2015). This demonstrates actual negative behaviour towards the environment when locals perceive a bad relationship. In contrast, Phinda staff are also often requested to talk about their journey/model as it is considered a success story. Finally, building relationships through education on conservation is mentioned. Two challenges are also evidenced in these C2 quotes, namely the dilution of benefits as communities grow, and the downside of success being that communities get accustomed to receiving large sums of money which raises expectations further. Specific quotes are drawn on below and the various sub-headings are once again indicated in bold.

Regarding the **approach being novel** at the time, a participant explained: *"I come from the communities where … conservation authorities were incorrectly applying it in these communities, such that it created a lot of tension and negative attitude, where people were forcefully moved out of those places and there was no consultation and proper communication [or] direct or indirect benefits. People would be moved away and then they will introduce the wildlife … and people would not really get an understanding of why conservation. The only thing that they could see is to hunt, because they were dependent on that for meat … I got to understand that [Africa] Foundation is actually a solution to what I used to have a problem with in terms of the attitude and understanding of conservation. And then later on I also developed a lot of … love for the communities"* (P350, 21:21). Another reflects similarly, and also discusses the complexities and danger of the work in the early years: *"When I started with Phinda … conservation only depended on high fences, armed patrol, anyone that walks into the game reserve or trespasses is arrested, killed in some cases. And the poaching at the time … was more subsistence poaching than what we see now. The scale was far different. So that's what really drew me to join the Foundation. … And also being part of crafting the strategies to really bring the communities on board, which was a very difficult task. A very, very difficult task, because this animosity was so deep-seated, you needed to constantly work around the clock to convince the people that we're talking about change. Because I was told in my face: 'How much more land do you want? Don't waste our time'. You'll be labelled as a spy – you're working for a white person who wants just more land. And it got dangerous sometimes, very, very dangerous"* (P354, 46:52).

The following quotes relate to the **good relationship in the context of direct tangible benefits for communities**. One participant talked about their focus on direct and indirect benefits: *"I would say on the whole I think it's good. I think it's positive. … the last ten, eleven years I think there's challenges and … there's always room for improvement … We're always trying to push the positive direct and indirect benefits to communities and … I do think we're on the right track. … money doesn't always create benefits, but if I look at what the Foundation has achieved over the last 25 years, the amount of funding and the way that they go about their involvement, I think a lot of their projects are sustainable …*

*Mnqobokasi will tell you they want to give land to us – their land that belongs to iSimangaliso … because they're just not receiving any benefits …. So, I do think they see &Beyond …, this model, working for them"* (P357, 45:49). Another focused on the role of employment in the relationship, stating that *"I would say 60% of the people of Mnqobokasi would have a positive … perception [of] Phinda. One of the things that they see as a [very] direct … benefit is seeing some of their families working here at Phinda. … Some … still have those reservations, and it might be because [they have] been looking for a job at Phinda and they haven't found a job. … So, I'd say positive, but … it's still a work in progress"* (P350, 36:36). Others spoke about tangible structures and projects that have benefited communities, for example building the Mduku clinic so that people no longer had to walk to access medical care. Further examples follow:

> *"Even if you go out, you talk to a youngster, you say, 'do you know Phinda?' 'Yes, I know Phinda'. 'How do you know Phinda?' They will start telling you about the projects that Phinda has done, the relationship that Phinda has, because the majority of the people, I would think maybe 90/92% come from the communities. I'm part and parcel of that as well"* (P352, 44:44).

> *"The whole community does feel the benefit of the money [that is paid to beneficiaries of the trusts]. … for instance, one of the projects that Mnqobokasi community embarked upon spending the trust funds on, was electrification of the whole area … When we build a school [or] clinic, for instance, that has no discrimination. It doesn't talk to whether you are a beneficiary or not. Every child will go to that school, every patient will go that clinic"* (P354, 62:62).

> *"But right now I think people are seeing Phinda as a … good example of what we are doing [for] them, in terms of offering jobs, in terms of Africa Foundation … building schools, … giving out bursary schemes, in terms of we, as Phinda, directly paying rentals to communities and then communities are doing something with that money …"* (P355, 25:25).

A recurring theme is the **success of the relationship with the trusts as well as good communication channels**, which are largely due to the well-functioning relationship with the trusts. Participants convey how leases have been obtained for the reserve to rent the land for over 70 years, with the trusts being operational and having a good relationship with PGR (P350, 40:40); and that the conservation side interacts mostly with the trusts and works hard on those relationships (P355, 22:22).

> *"The relationship is very good as I have said. It's really very good"* (P352, 42:42).

> *"The relationship between Phinda and Mnqobokasi and Mduku is probably the same in the sense that [it] is well-established now. There's clear channels of communication, employment opportunities that become available at Phinda are communicated to these communities, and Phinda will obviously try as much as possible to recruit locally"* (P354, 58:58).

> *"And with the trusts that have now been developed to channel the funds for community development or the lease, as it were, seem to be working very well. That has created an additional platform for engagement and dialogue between Phinda and the community, over and above the channel that was open a long time ago, which is the traditional council and Phinda management. So, I think the relationship is very strong, very cordial, and there's constant communication in terms of just ensuring the safety and security of the game reserve. And I think the community view the game reserve now as an asset that is truly of value to them"* (P354, 59:59).

*"We've been asked to attend numerous conferences to present and I can only think that it's [because] people want to hear what's happened here because it is [a success story] and you hear so many failures"* (P357, 49:49).

**Education on conservation as a relationship builder** emerged from one interviewee: *"I got to see that we can really change people's minds by educating them about the importance of conservation and … the importance of getting into a working relationship with the communities. Creating that relationship between the two – … it's a transparent wall, … as much as we see the fence and there's a lion on the other side, there's a transparent wall between the two. That's [the] relationship that you need, and you need to strengthen [it] so that you can have successful conservation …"* (P350, 21:21).

In terms of **challenges**, one has already been highlighted, but surfaced again here, namely dilution of benefits due to population growth in communities (P355, 24:24). The other challenge is that, with the trusts receiving rentals over R22 million, *"… they get used to it and then they want more … You will never satisfy everyone … So every year you have to do something more to satisfy what we broadly term the community"* (P357, 49:49). He explained further that they have found it beneficial to expose key community members to other failed projects and to get them to interact with other areas so that they can realise the success of their relationship with the reserve.

**The answers from the C1 focus group interviews** were far shorter, but very positive. Two participants talked about there being a good relationship, for example: *"Yes, indeed there is a good relationship between us and the game reserve"* (P353, 65:65). Another said: *"the relationship we have with the game reserve is like a brotherhood relationship"* (P353, 75:75). The other three quotes refer to specifics of why the relationship is good, mentioning the earnings of the traditional dance group and the chance for children to learn, for example:

*"We have a relationship with Phinda as the young people who've got traditional dance groups … so they hire us to come and perform for their guests and then we get paid … which helps very much"* (P356, 68:68).

*"The relationship is very good in such a way that Phinda opens up the opportunities for children to come and learn about nature"* (P356, 70:70).

***(c) References to poaching***

Regarding poaching, C1 provide three quotes, and C2, 11. Four C2 quotes deal with the **need to pursue better relationships in communities where poaching is a problem.** One mentions the need to involve adults as well as school children because they are the current decision-makers and can influence the rhino crisis more than children (P357, 57:57). Other examples include:

*"There's Kwa Jobe which is out to the north-west but we are separated by Mkuze Game Reserve, but we still have dealings with them and we've agreed that we need to have more dealings with them … from a security/poaching point of view. A lot of rhino poachers come from that community and a lot of our staff comes from that community …"* (P357, 26:26).

*"If you had to go to Kwa Ngwenya it's very different. I don't even know the indunas there. We've just had our first meeting. There's poaching issues there"* (P357, 51:51).

Linked to this are acknowledgements that **where communities benefit, there is less poaching.** A C2 participant, for example, stated: *"I think you have to look at a few other incidents like poaching … that are supposed to be happening inside the reserve. They are not happening, which means more people are seeing the positive thing. I will say 70% of people are happy with us here, and they see the benefits and … like 80% of our staff members … come from communities, they see the benefit"* (P355, 48:48). Another C2 participant stated *"I'm told the rate of poaching at Phinda compared to other communities or game reserves, is such that there's huge disparity. … a study was conducted by one student who … found that for every one animal poached at Phinda, ten was poached in the neighbouring game reserves"* (P354, 105:105). Evidence of this relationship is demonstrated by the fact that, if there is a poaching incident, reserve staff call the indunas, so that they are aware of what has happened (P255, 52:52).

Three quotes (two from C2 and one from C1) in fact relate the story of how Mnqobokazi community caught a group of poachers themselves. An example from C2 follows: *"I think there's now an understanding of what nature can do for you in return. … Comparing the past and the present at the moment, there's a huge difference. [For] example, … in Mnqobokasi community, the communities noticed a vehicle that was driving up and down and then all of a sudden they gathered, they stopped those guys, like 'what do you want, why are you driving up and down here?' Because they are aware of the rhino poaching. Those guys were sorted out by the communities. When the policemen came they found rifles, axe, panga – everything that they were going to use for poaching. So, the community can see exactly … the benefit from nature"* (P352, 46:46). The C1 quote expressed that *"… some people who were going for rhino poaching, they were captured by the community themselves because of the good relationship they have with the game reserve"* (P356, 156:156).

In terms of the **arrest strategy** if poachers are caught, C2 explained how, prior to the rhino crisis, poaching would be dealt with in-house, for example: *"If we would find people poaching inside Phinda, we would not take them to jail but would report them to the chief … then they will be fined by their tribal authority instead of taking them to jail or shooting them or killing them. So, the strategy was, let's maintain the relationship from the beginning. The problem now is that with the rhino poaching, if you catch someone that is even a suspect or somebody that has shot a rhino, that is a national thing. But if somebody has gone and killed an impala or Nyala, you know that person is hungry … It's not acceptable, but it is a minor thing than thinking of the rhino being killed"* (P352, 60:69).

Finally, several quotes deal with the **reasons for poaching**. C2 participants mention subsistence poaching (P354, 46:46) and revenge/retaliation by community members because of what happened to their families long ago (P355, 44:44). Three C1 quotes clearly make the link between poverty and poaching:

*"As much as we have already mentioned the positive light about the nature conservation being close to us, I would also like to mention that we would like the game reserve to … increase the capacity of employment for people who are nearby the reserve, and that will also positively influence that community members would not go into … the game reserve illegally for poaching …"* (P356, 138:138).

*"His concern is to involve other game reserves because Mqobokazi is [also] adjacent to iSimangaliso Wetland Park, but if the relationship is poor between the community and the game reserve, that will make people to be angry and then … they will [poach]. … He gave an example of rhinos that were introduced into iSimangaliso which were killed within a year … if there is a way that, not [only] Phinda, but all other game reserves … adjacent to the community can get together and try to find other ways of promoting new job opportunities for people so that [the] few people who might … suffer from hunger [will not] see the need to … poach the animals"* (P356, 153:153).

*"This is also an indirect cause or could be attributed to hunger, or poverty, or unemployment – … because some people who got money from the outside, from other communities, come here and … offer you some cash that if you show them where the rhinos are they will give you this cash. Because you are unemployed, you do not know where your next meal is coming from, you take the money, you show them where the rhinos are"* (P356, 157:157).

The matter of wanting to move land managed by iSimangaliso over to Phinda was also mentioned under 'Relationship' by a C2 participant. It is also one of the key findings of Burgoyne and Kelso (2014), that other residents perceived the benefits derived by Mnqobokazi from Phinda as greater than those from Mkuze. One participant from Kwa Jobe directly associated Phinda as the reason for better living conditions in Mnqobokazi and Makhasa. Seeing how Phinda provided better employment opportunities, bursaries and support to local schools in Mnqobokazi and Makhasa, as well as how differently the land claims were managed (community ownership with annual rentals in Phinda as opposed to once-off monetary compensation for Mkuze land claims), were significant causes of tension between local communities and Mkuze Game Reserve (Burgoyne & Kelso, 2014).

***(d) Appreciate actions taken by the reserve***

This next group of quotes pertaining to the relationship between the reserve and community are all understandably from C1 and are in the context of the community expressing appreciation for actions taken.

Out of the 12, six relate to educational benefits. Participants talked about schools being built, bursaries for tertiary education, environmental education for children and the exchange programme. Examples follow:

*"We benefited a lot from Phinda because now there are more schools that are built by Phinda"* (P353, 66:66).

*"Because when [school children] come out of there they really have a good understanding of what to do and how to conserve nature"* (P356, 70:70).

*"The relationship is very good in such a way that Phinda game reserve opens up the opportunities for children to come and learn about nature"* (P356, 70:70).

> *"With tourists around, here at school, we have developed a relationship with people abroad and we have benefited in terms of educational exchange programs. Their learners and parents come this side … and three of us went overseas for an exchange program with educators …"* (P356, 75:75).

Three comments related to Phinda caring for the community, with two specifically mentioning aid when people are in need: *"We have a good relationship because, … when we are in need they come through for us …"* (P353, 63:63); and *" … unlike before when they were arriving in this area, times were very tough, but now the relationship is very good because whatever we do they also help us and we benefit a lot from them"* (P353, 75:75). The third participant referred to Phinda donating meat for large community functions (P356, 74:74).

Two quotes relayed appreciation because employment opportunities are provided: *"there is a good relationship between us and the game reserve because our children get some job opportunities there"* (P353, 65:65); and entrepreneurs such as the traditional dance group can earn money (P356, 68:68). A third quote voiced appreciation that they have a *"better understanding of what to do when they see a wild animal just roaming around"* (P356, 72:72).

***(e) Appreciate reserve/resources***

Six of these seven quotes from C1 indicated appreciation for Phinda because the environment is conserved. Appreciation of nature and its conservation for future generations was evident, for example:

> *"We are happy because … there are animals there, like … rhinos, that other[s] … have never seen … but we have communities here who are lucky to have them nearby, so we know them"* (P353, 90:90).

> *"We are very pleased to have a game reserve and I think the relationship is very good because our grandchildren can be able to see the nature that we have close by"* (P356, 64:64).

There was acknowledgement that the land is in good hands, and that not having it conserved would be negative. One participant cited an example at Mkuze, and commented that if the fence was removed, *"people are unable to manage or to make profitable decisions when they are given the land"* (P356, 133:133). Another commented that "*It's good that we keep the game reserve as it is, because it helps to conserve the nature for the generation to come [who] will be lucky … to see the animals. … If the game reserve is demolished, the animals will be eaten and used for other uses [and] come to extinction"* (P353, 147:147).

The final quote acknowledged the economic benefit: *"the tourists that come to visit Phinda also contribute to the economy … because Phinda always share with the community"* (P353, 149:149).

***(f) Other***

Worth mentioning is the request from a C1 participant for assistance in setting up a recycling programme to handle waste that will benefit both the community and reserve (P353, 79:85). There were two

references to fear of wild animals from C1 – one related to fear of going into the reserve due to dangerous animals (P353, 93:93), while the other stated: *"I don't feel safe in case some other animals escape, like lions, sometimes I don't feel okay"* (P356, 66:66).

### *C. Summary: Relationship between community and protected area*

In this question on the relationship between the community and the reserve, it is clear that Phinda has a leading model, which has been entrenched over many years. Participants talked about Phinda and Africa Foundation following a new philosophy that placed relationship with the community as a priority, and with Africa Foundation and &Beyond working very hard at this. Outsiders view Phinda as a success and Phinda staff are often asked to share their story. The reserve now want to take this to a new level with a community development plan. This data showed that both C1 and C2 perceive the relationship to be good and strong. Overall, C2 have more to say on actions taken, on having a good relationship and about poaching; while C1 are vocal on appreciation of both actions taken and reserve/resources, and the good relationship.

Cutting across all the codes within this question, employment emerges in three of the codes – from C2 in the context of it making a significant impact in the community and benefiting a good percentage of people, and from C1 in the context of more employment required to curb poaching. While there is only minor mention of employment from C1 in this question, it should be kept in mind that in 'Q1 Knowledge', 'Employment' was the aspect most mentioned by C1. The mentions by C1 align with Muzirambi (2017) who found that communities near Phinda were grateful for employment opportunities. Direct tangible benefits emerge strongly, particularly from C2 who mention a wider range of benefits. Education is the most prominent across both C1 and C2; and apart from general community care, is the only other specific benefit emerging strongly from C1. Many examples of education-related benefits are mentioned by both C1 and C2, such as schools being built, the EEP for children, bursaries, and the exchange programme. It is these educational benefits and the general care (in the sense that Phinda looks out for them/helps them) that C1 are most appreciative of.

The trusts are mentioned often by C2, but not by C1. C2 attest to the success of this – the rentals and the good working relationship. The strong communication networks highlighted by C2 also extend to the tribal authorities. Phinda management and staff work diligently at these relationships, and community members in leadership are invited into the reserve to experience it, and most recently to be part of rhino dehorning. Burgoyne and Kelso (2014) also found that communities living adjacent to Phinda are more positive than other communities regarding their relationship with the reserve.

Much was said on poaching. The rhino crisis has changed the dynamics. In the past, in order to maintain a good relationship, poachers were handed over to the tribal authorities and not arrested. Now that poaching is far more serious, the tactics have changed. From C2, it was evident that a good relationship

and benefits decrease poaching, and that improved relationships are required in communities where poaching is a problem. C1 quotes strongly linked poaching and poverty. It appears they understand the importance of conservation, but hinted that poverty and hunger can change what you are willing to do. They do, however, want to solve the problem of poaching.

C1 showed appreciation of nature and its conservation for future generations. They feel that the land is in good hands at present.

Challenges emerging were that the trusts need to become more independent from reserve staff; benefits are diluted due to the growing population in the communities; and with the success experienced in Phinda's neighbouring communities, C1's expectations have increased.

Section 6.3.2 contributes towards answering Research Objective 3.

## 6.3.3 Positive and negative changes that protected area has brought to way of life

Table 6.7: Orientation to Question 3-2: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method | Section |
|---|---|---|---|---|---|
| Q3-2 Pos changes<br>Q3-2 Neg changes /<br>PC=Positive changes<br>NC=Negative changes | Y | | How has the nature reserve changed the way you live (positive and negative)? How have things changed? | FGI | Positive changes (Section 6.3.3.1)<br>Negative changes (Section 6.3.3.2) |
| | | Y | How do you think the nature reserve has changed the way the local community lives (positive and negative)? How have things changed? | II | |
| **Research Objective 4** | | | 4 | | |

### *6.3.3.1 Positive changes*

#### *A. Overview: Positive changes*

All data pertaining to positive changes mentioned by C1 and C2 in the PGR/M case study are captured in Table 6.8 below.

For the C1 focus groups, 23 quotes emerged. Out of the 15 codes developed across the three case studies when coding this question, nine were used in coding the responses of the Mnqobokasi focus groups. Both focus groups were almost equally responsive, with no marked differences emerging. It is interesting that the codes 'Collaboration/contact' and 'Revenue sharing' had no C1 quotes, yet these themes emerged strongly in previous questions for this case study. 'Revenue sharing' is not included in Table 6.8 since it had zero quotes (This approach is explained in Section 3.10.1). The C2 interviews revealed 41 quotes, also making use of nine codes. As with C1, 'Education/training' and 'Employment' are referred

to most often as positive changes. For C2 this is followed closely by 'Facilities/infrastructure' and 'Collaboration/contact'. For C1, the remaining codes have low frequencies. Overall, the perception of positive changes due to the reserve's presence appears stronger among C2 participants.

Table 6.8: Code frequencies for 'Q3-2 Positive changes': PGR/M

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (PC=Positive Changes)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| PC: Collaboration/contact | 0 | 0 | 0 | 5 |
| PC: Community projects | 1 | 1 | 2 | 4 |
| PC: Education/training | 2 | 4 | 6 | 8 |
| PC: Employment | 2 | 3 | 5 | 7 |
| PC: Environment is being conserved | 1 | 1 | 2 | 1 |
| PC: Facilities and infrastructure | 1 | 1 | 2 | 6 |
| PC: Inter-cultural contact | 0 | 2 | 2 | 1 |
| PC: Other | 1 | 1 | 2 | 5 |
| PC: Personal enjoyment of reserve | 1 | 0 | 1 | 0 |
| PC: Successful land claim | 1 | 0 | 1 | 4 |
| **TOTALS** | 10 | 13 | **23** | **41** |

### *B. Specifics: Positive changes*

#### *(a) Education/training*

For both C1 and C2, this received the most mention (C1:6; C2:8). In the previous question, education also emerged strongly from both constituencies. However, the mention of training programmes is new in this question.

From C1, four participants mentioned bursaries, for example:

> *"…It doesn't matter who get the bursary, but as long as it's children from the community we all benefit from it because they come back to bring up this area"* (P353, 116:116).

> *"Phinda Game Reserve has changed the community's life in terms of providing educational bursaries for tertiary students which provides a lot for the poor community or household …, as their children are now educated"* (P356, 94:94).

Another C1 participant mentioned the 'Star in Training' programme which trains people from the surrounding communities: *"[Phinda] provides … short courses/training, which gives people skill development in terms of employability … [with that] training, … if opportunities arise, they've got the certificate … If you want to be a chef you go straight in the kitchen, if you want to be a waiter or a butler, there is a butler system, if you want to be a tracker, if you want to be a ranger, … if you want to be in housekeeping …"* (P356, 94:96). This quote shows detailed familiarity with the workings of the tourism

industry. The final quote related to the EEP for children, commenting that it equips children well to conserve nature (P356, 70:70).

C2 referred four times to training programmes, twice to the EEP and once to bursaries. One of the quotes is general, referring to communication and education as key positive changes (P357, 65:65). Under training, three participants alluded to to the 'Star in Training' programme, for example:

> *"We have got another programme for six months, Star in Training, where they come and train in different departments, they get certification. During that training they also get meals and accommodation and … you get a certificate and [if] there is a job opportunity available, then you get employed. Then you … become a waiter … you can become a receptionist or … a chef and even to the point of being a lodge or camp manager. Some people even to the … level of managers, and those who have become chefs they go out and – I would say they're being hunted …"* (P350, 76:76).

> *"In terms of skills training, Phinda has created a very big pool of skills that has benefited not only the community, but the surrounding lodges and tourism establishments. If you go to the neighbouring tourism establishments, you'll find that there will either be a chef that was trained at Phinda, … and so forth. So, the skills base in the community has grown exponentially in the sense that most of those people have got an opportunity to get training. … If there's an opportunity, [Phinda] will absorb them, but otherwise they release them to look for employment somewhere else"* (P354, 75:75).

Another referred to conducting workshops in the communities: *"We sometimes work with Endangered Wildlife Trust … where we go out into communities and [do] workshops. … There is this poisoning of animals, like vultures, … then they sell them to make muti[32]. There is a danger … because when they kill those vultures … then that person is getting poisoned [by] secondary poisoning from the vulture. And then people sometimes also use muti to kill whatever and then they consume that. And [so] we do awareness … to say 'guys, you must be careful of what you are eating. You must know where it comes from, and how it's been killed, so that you are safe'. … There [are] scenarios where people have died because of secondary poisoning … Also [the] environmental side of things, where we'll say … do not wash vehicles in the dams, because … people will come and use the same water. … My point is we are not only helping Phinda, but also educating communities [to protect themselves]"* (P355, 36:36).

Two quotes related to the EEP, mentioning taking school children into the reserve and the programme with the trusts and tribal authorities where they get taken into the reserve, most recently to experience the rhino dehorning (P355, 22:22; P357, 69:69). These programmes have already been mentioned in the preceding question. Finally, an interviewee talked about the bursary schemes run by Africa Foundation (P355, 22:22).

***(b) Employment***

In employment (C1:5; C2:7), both constituencies touched on there being more jobs than before the reserve started, the positive trickle-down effect of these jobs on families, and opportunities for small

32. 'Muti' is an African word for medicine, particularly referring to herbal medicine (Collins English Dictionary, 2017).

businesses. In addition, C2 mentioned up-skilling and provided numbers to illustrate how many of the community have benefited from employment.

A C2 participant explained the history regarding employment: *"Overall I think it's very positive because historically [with the farming that] was here, employment was definitely not as much as from a skills development/employment [perspective]. I think the creation of the nature reserve has been very positive and beneficial. I do think these communities … in this area are much more affluent than others"* (P357, 83:83). He continued in the same quote to state that this and other benefits may have negative impacts on PGR because people from other areas move into these communities, so that they too can benefit. It also emerged in the study by Burgoyne and Kelso (2014) that outsiders are moving into Mnqobokazi. Two C2 participants furthermore mentioned the lack of other employment opportunities in the area, for example: *"I think it has changed the lives of people surrounding it, especially … the direct benefits, which is employment. There are no factories here, there are no mines … people are dependent on working in this area, especially [at] Phinda"* (P355,28:28). Moreover, the scale of the impact of this benefit (providing for families and equipping people for success) is illustrated in the following quotes:

> *"Over 60% of people working at Phinda [are from the communities] and I would say it created sustainable jobs, … because you have people that have worked at Phinda since Phinda started and they've been able to … look after their families, … get their children to go and study, now others are even working, they are building their homes. … and that goes with skills development. There's been a lot of people that have come out of Phinda and got a job at other places because they look at you coming from &Beyond or Phinda, 'hey, we know that place'. I know one of the chefs now, who is a chef at Tiger Lodge, at one of the very top lodges, … he was here as a chef. … he came here as a waiter"* (P350, 76:76).

> *"I think 92 of the employees here are from the communities. That, again, is a huge change, because in our culture as a Zulu or any African, I'll look after [my children], but at the same time maybe you have your grandmother or your brother that passed away after having children – you have to look after those children. So, because of people … being employed here, … those kids without parents are at school because somebody is looking after them. That's a huge benefit …"* (P352, 50:50).

This positive spin-off that employment has on the wider family also emerged in the study by Muzirambi (2017).

Finally, business opportunities were mentioned, citing the example of someone providing staff transport, to take staff in and out of Phinda (P354, 75:75).

C1, as mentioned above, also comment on there being more employment than beforehand, the trickle-down effect of that employment, as well as small business opportunities, for example: *"by employing people who are from the community [it] enables them to provide for their children. … even if they do not get bursaries, they can always send their children to school through the salaries they are being paid"* (P356, 99:99).

***(c) Facilities and infrastructure***

C1 had two quotes here, in contrast to six from C2. Two C2 participants reflected that facilities and infrastructure comprise a very significant positive change:

> *"… your social development infrastructure, such as schools, clinics, bursaries and things like those. So that, to me, is the biggest benefit"* (P354, 75:75).

> *"If you go into these communities – the schools, the clinics, the health facilities, the sport facilities. I'm not saying that all of that is from the nature reserve, but I think it has had a spin-off effect. From what I understand, a lot of people [from other areas] want to come and live in these communities"* (P357, 83:83).

Moving on to specifics, interviewees mentioned Mduku clinic (P352, 40:40), building of schools (P355, 24:24), the road and the pipeline. The latter two are expanded on below:

> *"Right now we are busy with a pipeline which [will come] from Mkuze to Phinda, … communities are going to benefit [by] getting water almost every day. Like now, there is no water. … when we plan we look also at how are they going to benefit" (P355, 28:28).*

> *"… people don't see it that much but the roads that come into the reserve are getting maintained because we've got a reserve, which helps communities a little bit … They don't [make that link], because to them the road was already there, but we have to make a call every time the road is damaged, to say 'guys, can you please come and fix the road' … we maintain. To us, we know, we see, but to them it's like 'it's our road, it's getting fixed', they don't know why …"* (P355, 29:32).

This second quote above highlights the challenge of benefits that are reserve-related but not perceived in this way by communities.

For C1, the focus was once again on schools, for example: *"I can quote a number of schools here. Most of the schools here are built by Phinda, Mnqobokasi … there is a touch of Phinda in all the schools around this area"* (P353, 117:117). The second quote also mentioned schools, but in conjunction with the provision of development: *"Actually what I know about Phinda Game Reserve is that it provides a lot of development in the community … and then in terms of providing some services, especially developing schools"* (P356, 24:24).

***(d) Community projects***

Donation of meat to the communities is mentioned three times – twice by C1 (once in each focus group) and once by C2. All the other quotes emanated from C2 and related to different projects, namely upliftment through tourists who visited the community; the sports programme; and opportunities for individuals to be empowered and the resultant positive results of this. The relevant quotes follow next in that order:

> *"Nkomo [Primary School], has got friends … from the U.S. – they raise funds, even adopt children [and] pay their school fees … even the orphans. S and J have adopted the orphans and they came last year for their graduation at University of KwaZulu-Natal. How did it come about? Because Phinda is here, guests came to meet the community, Mrs Z shares her story about how she started an orphans and*

*vulnerable children programme and then they … meet those orphans, get connected and touched to support them. They support them from primary, high school, buy uniform. Some even buy them groceries monthly, send money through Mrs Z at the school. She will look after them. They come visit maybe quarterly, to see … how they doing. So, it has really connected these communities with the international community, and also there flows direct … and indirect kinds of benefits"* (P350, 76:76).

*"Charity begins at home. We started … with only our Phinda teams … four Phinda teams, which is North, South, Central and … anti-poaching team … We play tournaments. … We play for trophies … If we have two Phinda teams we'll get two community teams, either from Mnqobokasi or Makhasa, and then we'll have a trophy, … medals … In the community there's a big stadium … where we can play at night. Almost every week there is a Phinda team that is playing an outside team … soccer mostly, and then netball [for the] girls. … Sometimes I used to work with Kingsley Holgate[33] – there's a program … Rhino Art [where we] go out in the communities and do the workshops with kids, and then we will play soccer, tug of war, … lots of sports …, just to get them doing something. … I say if we were to build this nation we will have conservation [and] sports … In conservation we all speak one language. In sports it's one language. Those two, to me, can bring everyone together, because when we do it, it doesn't have a colour … [If] we play it right, we can all win"* (P355, 151:154).

*"… When she shares a story now she would say … I never knew that I [could] do a presentation, but through us bringing guests she got to understand how to deal with guests, how to raise money for her school. Even beyond that, she has been instrumental in raising funds for many other projects. I've been with her twice in the U.S. at a fundraising event where she was a main speaker. Like Khulani Special School, she went to [a] fundraising event in the U.S. and … we got about R800 000 from that, and then we were able to raise another R600 000 [from] which we built the first phase at 1.4 million, which was able to leverage government funding of 8.9 million"* (P350, 76:76).

These quotes aptly demonstrate the remarkable level at which Phinda and key individuals in the community are operating in terms of community beneficiation. As in 'Q2-1 Relationship', some projects are not mentioned by C1, and awareness of these could raise positivity towards Phinda.

***(e) Collaboration/contact***

It is interesting that all five quotes coded with the code 'Collaboration/contact' came from C2. They relate to the clear channels of communication established between the trusts and tribal authorities, which emerged under 'Q2-1 Relationship', and which C2 work hard at maintaining. Of interest is the following quote which highlights the intentionality of C2 in informing people new to the community about the work of Phinda. Communication is often challenging since new people move into the area, and it is difficult to know who has heard the message, even among those living in the community for a while. The quote below begins with the participant explaining the rapid community growth and the resultant dilution of benefits: *"Everytime they grow, the [positive] perception reduces from the community*. *But … we did not stop doing what we are supposed to do in going out and reaching out to communities. Even those new people that are coming in … to say, 'we are Phinda and this is what we're doing …'"* (P355, 22:22).

33. The Kingsley Holgate Foundation is a humanitarian organisation that focuses on malaria prevention, water purification, providing spectacles to the needy and conservation education. The latter drive aims to connect local communities, nature and culture (Holgate, 2019).

***(f) Successful land claim***

This code was used for five quotes (C1:1; C2:4). C2 mentioned paying rentals to the trust and leasing the land from the community. This theme also emerged in 'Q2-1 Relationship'. Here it features in the context of being a positive change. A C1 community member mentioned that *"… I rely on Phinda for my livelihood … since I'm among the people within the community who has been chased out of the area where the game reserve is situated. I am the beneficiary of the trust … so I gain a lot of money from them"* (P353, 120:122). She explained that it was her grandparents who were forced off the land many years ago. A C2 participant stated that *"… after the land claim, both communities (Makhasa and Mnqobokasi), they're getting the … rental for the lease, … they have some of their own projects from the money that they getting … that has helped them a lot. Like for instance, they also [offer] some bursaries … from that"* (P352, 48:48). The bursaries referred to are those offered by the Qhubekani Mnqobokazi Community Trust. Another C2 interviewee argued against viewing the community's loss of land as a negative change: *" I can't really say that [it is a negative]. It's a positive more than anything now, because [the land provides] good revenue … it is their land now … They are landlords to Phinda"* (P354, 83:85).

***(g) Environment is being conserved***

Three quotes were coded here (C1:2; C2:1). The first two quotes come from C1, followed by the quote from C2:

> *"It has changed my life because some of the plants or trees that are there that are useful in our lives, might not have been there if [the reserve was] not there. That means they could have become extinct"* (P353, 113:113).

> *"We have that information, we have gained knowledge on nature conservation, knowing that we see [an escaped] wild animal we cannot only picture it as meat, but it needs to be reported so that it can be taken back and be kept for the next generation to come"* (P356, 92:92).

> *"I see the protected area as a positive thing to the communities in most cases. Whatever was here is still here compared to what you see outside now. There is trees that used to be everywhere in this area of which they are [now] only found inside here"* (P355, 42:42).

The above quotes are encouraging, particularly those from C1, which indicate a new understanding of nature and its value.

***(h) Inter-cultural contact***

The code 'Inter-cultural contact' was used on three quotes (C1:2; C2:1). One C1 participant spoke about tourists visiting the schools and being part of the exchange programme, while the other referred to inter-cultural contact while working at Phinda: *"when the guests are coming to the game reserve and some of the people from this community are working there, it helps them to learn to communicate with a wide spectrum of people, of which it gives them that ability to [engage with other cultures]"* (P356, 99:99). The C2 interviewee referred to tourists visiting communities, voicing this a positive change: *"Phinda being here … has made the communities to actually meet the international community, and that alone is a [positive], because they get to interact with them"* (P360, 76:76).

***(i) Other***

Quotes coded here can be divided up into: the positive changes resulting from Phinda following a new philosophy; people recognising the benefits; overall upliftment of a community that was previously very poor; and contribution from tourists. These 'other' themes enlarge the concept of positive changes, for example, that when communities recognise benefits flowing from a reserve, this is also a positive change – not just the benefit alone. Likewise, the fact that Africa Foundation and Phinda chose to follow a philosophy which was novel at the time, has influenced other reserves in the region to seriously consider what they do for the community. This too is perceived as a positive change.

Regarding the new philosophy, a C2 participant reflected on growing up in a community which experienced the cruelty of the fences, fortresses and fines philosophy, and who, when starting to work for Africa Foundation *"saw an opportunity to really try and lend a hand in finding a solution, I thought this is a wonderful chance"* (P354, 42:42). He then expressed how this philosophy has influenced other organisations, creating a powerful positive change: *"Over and above that, being able to change the rules of the game, not only [locally], but for the entire region, for me is a big benefit. Because whereas a lodge which is not Phinda, which was not doing anything about community development before, but because of the influence that Phinda has through Africa Foundation, they now have concerns about [that]. They really have to ask themselves questions: 'What do we do for the community?' So, that becomes a benefit, because it changes the mindset of the local players to really look at community development more seriously and try and do something about it…"* (P354, 75:75).

In terms of the community recognising benefits flowing from the reserve as a positive change, two C2 participants respectively mentioned that due to benefits received, poaching is not happening (P355, 48:48), and that C1 even contribute to catching poachers (P352, 46:46).

One C2 quote related to overall upliftment as a positive change: *"Phinda came in to very, very poor communities. … you can't compare … today's communities with the past communities … there's a huge change. I know the government has done some work as well, but the game reserve … has done a lot. There might be some negativities … but in most cases I have never heard someone saying anything negative about Phinda or about the reserve"* (P352, 52:52). This is commendable.

The two C1 quotes regarded tourists uplifting the economy and Phinda sharing the returns with them (P353, 149:149), and that it was not Phinda that had done anything negative, but rather the apartheid[34] government who originally forcibly removed people from the area. This quote is coded under 'Positive changes' though, since the participant continued by saying that *"as the time went on it also benefited the community, so I will say it didn't affect us as this generation"* (P356, 105:105).

34. Apartheid is an Afrikaans word referring to the segregation system previously practised in South Africa, where racial groups were divided and kept separate by law (Collins English Dictionary, 2017).

### *C. Summary: Positive changes*

Amongst C1, there is a lower frequency of quotes regarding positive changes compared to C2 (C1:23; C2:41), but 23 quotes still constitutes a significant number, which is very positive.

In this case study there is a fair amount of agreement between C1 and C2 on what the positive changes are. Both acknowledge education/training and employment as key positive changes. Under employment, both constituencies mention that the situation is better now than before Phinda started, and comment on the positive spin-offs due to employment of a family member. In terms of education/training positive changes, C1 highlight bursaries and schools the most, while C2 mention training programmes that up-skill C1, as well as environmental education initiatives underway. For facilities and infrastructure, C1 mention schools, while C2 expand on this, mentioning roads, clinics, sports facilities and the planned pipeline.

Under community projects, C1 only mention donations of meat for community events, but C2 provide detail on the programmes for orphans and vulnerable children (started by a C1 member but supported by tourists), sports, and the fundraising achievements for a special needs school (again involving a C1 member).

C1 do not mention collaboration/contact and revenue sharing. This is surprising considering the reserve has such an extensive communication strategy with the trusts and tribal authorities, and that rentals are paid annually to the trust as a result of the successful land claim.

C1 and C2 recognise that conservation of the environment and inter-cultural contact are positive changes, with C1 being slightly more vocal on both of these.

Under 'Other', C2 mention that their philosophy positively influences other reserves, and that when communities recognise that they are benefiting, this can also be seen as a positive change.

Overall, the positive changes in this question refer more to tangibles such as employment, infrastructure and bursaries. Intangibles emerging from both C1 and C2 were the environment being conserved and inter-cultural contact. Other intangibles were from C2 only, namely the wider influence of the Phinda philosophy and collaboration/contact.

In this question, several aspects are highlighted which appear could be communicated to the community as positive changes due to the presence of the reserve: infrastructure other than schools; the different community projects; and the financial benefits emanating from the trust funds. The lack of mention of collaboration/contact by C1 could suggest the need for more communication to the wider community.

Alternatively, it could indicate that C1 are used to good communication from C2, and hence it is no longer considered as something positive.

#### *6.3.3.2 Negative changes*

##### *A. Overview: Negative changes*

Section 6.3.3.1 dealt with the positive changes under Q3-2. This section covers the negative changes, with the data being presented in Table 6.9.

Table 6.9: Code frequencies for 'Q3-2 Negative changes': PGR/M

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (NC=Negative Changes)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| NC: Harsh on poachers | 0 | 1 | 1 | 0 |
| NC: Lack of access to natural resources | 0 | 0 | 0 | 7 |
| NC: Lack of access to reserve | 1 | 0 | 1 | 0 |
| NC: Unfair employment policy | 1 | 2 | 3 | 1 |
| NC: Wild animals – fear and damage | 2 | 2 | 4 | 2 |
| **TOTALS** | 4 | 5 | **9** | **10** |

Once again, no major differences were detected in the answers of participants from Focus Group 1 and 2. For C1, frequencies are low, but the code most used was 'Wild animals – fear and damage' (4) followed by 'Unfair employment policy' (3) and one quote each under 'Lack of access to reserve' and 'Harsh on poachers' respectively.

C2 were most verbal on 'Lack of access to natural resources' (7), but the context of the quotes must be examined before coming to conclusions. With C1 not mentioning this at all, it perhaps indicates that C1 do not see this as a negative change. The remaining frequencies are low and are allocated to 'Wild animals – fear and damage' (2) and 'Unfair employment policy' (1).

##### *B. Specifics: Negative changes*

***(a) Lack of access to natural resources***

The code 'Lack of access to natural resources' was used the most in 'Q3-2 Negative changes', but all mentions were from C2. It is important to note the context of these quotes. Three participants start by indicating that it is very hard to think of negatives (for example *"I've got to think. I've got to think"*, followed by a long pause); and the participant talking about land reflected that it is debatable whether this is a positive or negative. This sentiment was confirmed under 'Q3-2 Positive changes', where some C1 participants feel that it is good that the land is being protected and safeguarded by &Beyond. Furthermore, six of the seven quotes under the code 'Lack of access to natural resources', alluded to

natural resources where collection thereof was *"very very miminal", "long ago", "done before", "previously"*; and which locals *"used to speak about"*, and *"had request[ed] in the past"*. So, while there are seven quotes, they are predominantly in the context of this not being relevant any longer. Moreover, to confirm this finding, C1 said nothing regarding lack of access to natural resources under this question. Perhaps resource access is therefore not an issue for C1. This could be because they have not had access to the land for many years since it was given to farmers, and/or they perceive the other benefits received from PGR to be sufficient. Natural resources mentioned by C2 are medicinal plants, ilala palm, thatch grass, reeds, grazing for cattle and bush meat. As indicated later in Section 6.3.8.3, Phinda used to allow more resource access, with collectors being escorted by game guards. The reasons provided in this section for the reduced access are the current poaching crisis (mentioned in two quotes), snares being found, and that collection tends to exceed what is sustainable. Examples of these quotes follow:

> *"I think they used to speak about [medicinal plants], [saying they didn't want it from a nursery] because they don't work well for muti – 'we want wild trees that are out there'. Some people do say 'we want … to cut grass' … but we haven't had it that much. It's very, very minimal"* (P355, 50:50).

> *"I'm not sure if that is still being done, but previously people would come and harvest ilala for crafts"* (P354, 93:93).

> *"They were allowed to come in, cut the grass for thatching, … harvest barks and roots, as long as it didn't kill the tree. But … with this higher rate of poaching, [the reserve is] probably a bit wary because even then, they would pick up quite a lot of snares, because other people were going [in] under the guise of coming to do this"* (P354, 95:95). (The participant mentioned that this was approximately 10 to 15 years ago).

> *"Well I can't say historically what access they had to this land, but certainly we don't allow any resource utilisation. … I don't encourage [it] here because it tends to … exceed what's sustainable. … I've had requests in the past for things like grass and a lot of palms and reeds, … but I don't encourage it. There might be a once-off request and that's allowed"* (P357, 83:83).

While it did not emerge in this study, Dahlberg (2001), in her research with women from Mnqobokazi, reports that the majority of women are involved to some extent in harvesting grasses, sedges and palm leaves to make crafts for the tourism industry; and that they harvest in the wetland – both on communal land and within iSimangaliso. This study, conducted in 2001, reports that a dominant thread in local history was a struggle to make a livelihood as resource access diminished. Hansen (2013), in her research with communities around iSimangaliso, reported that the erection of some fencing has resulted in tribal authority leaders of Mnqobokazi, Makhasa, Nibela and Mbila criticising the fence because it limited access to natural resources. Representatives of three of these communities actually prohibited the fence. Burgoyne and Kelso (2014) cast more light on this, stating that with this access now more restricted, the community has shifted from hunting and gathering to pastoralism, with a focus on maize, cattle and goats. Their participants reported a growth in cattle and goats around the reserve as they felt this was one of the few options open to them by which to earn a living. In terms of Phinda, even though the land changed hands, the community always felt aggrieved that it had been taken from them. For &Beyond and Africa Foundation, it has therefore meant hard work and many years of building trust to

get to where they are now in terms of a good relationship, and the community generally not requesting access to resources[35]. Historical context thus appears to influence attitudes.

Finally, two quotes related to some people holding a negative perception regarding the land being leased, and thus not being available for local use:

> *"Well, I wouldn't say much around the negative. I'm not sure if this is a negative or a positive … probably the community at first felt like they are being … robbed of their rights to use their land. That's the perception that was there and it's still there [for] some. … If there is a land claim for another conservation area next to Phinda, then the community will rather say 'no, we rather lease this place to Phinda'. [But some] people think [they are] still giving [Phinda] more land … Some people [think] they are also being robbed of the opportunity to make a living out of hunting … 'even our great grandfathers and ancestors used to hunt … and feed the family. Now we not supposed to do it [while] they cannot even provide us with enough jobs'. … Phinda can't hire everybody, there's X number of … job opportunities"* (P350, 78:78).

> *"That's why I say there's more of the positive than the negative but … [some] people say 'we used to live here, we had cattle, we had this and now the land was taken'. … land [that's] nutritious to their cattle was taken by wildlife and then they were given a piece of land with no water or anything"* (P355, 44:44).

This quote was followed by the reference to people poaching due to retaliation or taking revenge, which was quoted in 'Q2-1 Relationship'. The reader is reminded that quotes mentioned elsewhere in the interview that had a bearing on relationship were coded under 'Q2-1 Relationship' (Section 6.3.2).

***(b) Wild animals – fear and damage***

This was the second most used code (C1:4; C2:2). It was also mentioned twice by C1 in 'Q2-1 Relationship'. In the four quotes from C1, they talk about wild animals escaping and eating livestock, the fear for people's own safety, diseases from wildlife spreading to livestock and one case of property damage. For example:

> *"Some … dangerous animals, they sometimes escaped and when they do, they eat livestock … from the community"* (P353, 129:129).

> *"I believe that the negatives about having the game reserve next to the community, firstly, is that there is a fear of danger … when there is an escape of dangerous animals that might come to the community, which puts the lives of the people in danger. Secondly, … when it comes to livestock, like cows and goats, there are some diseases that come with … wild animals … like tick bites … [which] might negatively affect our livestock"* (P356, 117:117).

A C2 participant mentioned the only case of property damage in over 25 years of him working for Africa Foundation: *"… we had elephants that went out and destroyed a house. Part of my assignment was to go and build that house – we rebuilt it completely. In fact, it was a much more improved house to the*

35. Personal communication with Mr Isaac Tembe (Africa Head, Methodology and M & E, Africa Foundation) via skype on 2 August 2019.

*point where some neighbours were saying: I wish the elephant destroyed my house! So yes, it has happened. But that's literally maybe 23 years ago"* (P354, 88:91). The C1 quote on this incident acknowledged that *"… Phinda came in to rebuild the house"* (P353, 143:143). The remaining C2 comment recognised that C1 may see dangerous wild animals as a negative change, but that Phinda takes every effort to ensure animals do not escape (P354, 85:87).

***(c) Unfair employment policy***

This code was allocated to four quotes (C1:3; C2:1). Two C1 quotes relate to dissatisfaction with remuneration and a request for salary categories to be clearer to enable staff to understand their pay: *"… they are getting paid like actually equal to nothing or close to nothing, whereas Phinda … is making a lot of money"* (P353, 140:140) and *"… we always heard the rumours that they are not happy with their remuneration, which might not be enough for what they are doing. I think that Phinda should also [help] people understand [how] they are categorised so that they can be satisfied"* (P356, 125:125). C1 also mentioned unfair dismissal: *"… I believe that … especially [for] those working longer years like … 15 to 20 years, they should look after those people especially. Because it happens that you never had a warning or never had any misconduct but if you are caught with any wrongdoing, it doesn't matter how minor that wrongdoing is, you just get fired and you've got no benefits. I think they should change their employee policies"* (P356, 113:113).

The C2 quote concerns insufficient career advancement for locals to management level: *"… one common thread that I have heard is insufficient employment opportunities at the senior level [for] the locals. [This] obviously does not really give them an opportunity to influence decision-making at the highest level of the company"* (P354, 85:85).

While there are only four quotes coded under 'Unfair employment policy', it is good for the reserve to be aware of these perceptions and to address them by means of communication to staff and/or changing policies if necessary.

***(d) Other***

The final two quotes are worth noting because, as stated by a C2 participant, 'perceptions are everything'. A C1 participant cautiously voices via the translator that she thinks the reserve is very harsh on poachers: *"She said she doesn't have any evidence or proof … but she said that the security system in terms of controlling the poaching and people getting into the game reserve illegally … should be revised, because she believes that they shoot to kill, if they find a person poaching. But [what about] people who go in illegally for poaching because they are desperate … for food. So … the game reserve itself should change the policies in terms of their security system"* (P356, 110:110). It is helpful for the reserve to be aware of perceptions such as these.

The other quote relates to access to the reserve: *"[Phinda] should open up some option or agreement with adjacent communities so that when we get there for leisure or visiting, they should give us discount, so [that we're not] charged like people that have come from far"* (P356, 110:110). Dual-pricing is a worthy consideration, as it increases the opportunities for local people to visit, which appears to be a powerful positivity builder.

***C. Summary: Negative changes***

C1 conversed most about fear of wild animals with respect to humans, livestock and property damage. Next was unfair employment policy which was a new code introduced when coding the Phinda data. Participants mentioned dissatisfaction with remuneration, unclear salary categories with a request for clarification, as well as unfair dismissal. Two quotes relate respectively to a perception of over-harsh punishment for subsistence poachers, and a request for lower prices for local people when visiting PGR.

C2 have almost the same number of negative changes. It is noteworthy that C2 participants clearly struggled to think of negative changes. Lack of access to natural resources surfaced the most, but based on quote content, it appears to be a problem of the past. Furthermore, C1 do not mention it at all, suggesting that, for whatever reason, resource access is not an issue for them. C2 do, however, indicate that some community members are negative regarding the loss of land, feeling that they have been 'short-changed'. Fear of wild animals also emerges, and was C1's most mentioned negative change. One C2 participant mentioned insufficient career advancement opportunities for locals to reach management level.

In comparing positive changes to negative changes, both C1 and C2 mention more positives (C1:23; C2:41) than negatives (C1:9; C2:10), which is noteworthy. The totals for negative changes for C1 and C2 are also far closer than they were for positive changes. Further cross-question analysis is undertaken in Section 6.3.10.

Section 6.3.3 contributes towards answering Research Objective 4.

## 6.3.4 Increasing positive attitudes towards protected area

Table 6.10: Orientation to Question 4-3: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q4-3 / MP=More positive | Y | | Some people like this nature reserve and the animals. Some people think there are better ways to use this land. What would make you more positive towards the reserve being here over the next 100 years, that is, down to the time of your great-grandchildren? | FGI |
| | | Y | What do you think would make the local community more positive towards the nature reserve being conserved in the future? | II |
| **Research Objective** | | | 6 | |

### *A. Overview: Increasing positive attitudes towards protected area*

The results for this question are presented in Table 6.11. There were no noteworthy differences between C1 Focus Groups 1 and 2. C1 quote frequencies were low throughout (never above three) and no one code dominated. The codes used to code C1 data were 'Development/infrastructure', 'Employment', 'Information/education' and 'Other'. The latter covered additional thoughts on increasing positivity. C2 had high quote frequencies for the code 'Information/education'. Overall (for C1 and C2) it was this code that was used the most, followed by 'Involvement/interaction' and 'Development/infrastructure' (six quotes each). Interestingly, 'Involvement/interaction', while high for C2, did not emerge at all from C1; but for 'Development/infrastructure, both constituencies were vocal. In contrast to C2, C1 did not have much to say in this question (C1:9; C2:26). This could indicate a fairly satisfied community. It could also indicate a reserve whose staff are always seeking to improve this relationship. Their intentionality has emerged previously in this chapter.

Table 6.11: Code frequencies for 'Q4-3 More positive': PGR/M

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (MP=More Positive)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| MP: Community projects | 0 | 0 | 0 | 4 |
| MP: Development/infrastructure | 1 | 2 | 3 | 3 |
| MP: Employment | 0 | 2 | 2 | 3 |
| MP: Enjoyment of reserve | 0 | 0 | 0 | 3 |
| MP: Information/education | 0 | 2 | 2 | 7 |
| MP: Involvement/interaction | 0 | 0 | 0 | 6 |
| MP: Other | 2 | 0 | 2 | 0 |
| **TOTALS** | 3 | 6 | **9** | **26** |

### *B. Specifics: Increasing positive attitudes towards protected area*

#### *(a) Information/education*

Nine quotes were coded here (C1:2; C2:7). Education has surfaced before in this analysis (Sections 6.3.1.1, 6.3.2 and 6.3.3.1) as being very important to both constituencies. This code though also included 'Information'. The C1 quotes both related to education. For C2, three related to information, two to education, and two mentioned both education and information. C2 thus included the 'information' aspect, which was not mentioned by C1.

Beginning with the quotes regarding **information** as an aspect that would make people more positive, two C2 quotes related to understanding the importance of conservation and tourism in bringing benefits. This is not always easy to communicate, but the second quote provides a striking example.

> *"I think what would make it easier for them is … to be well informed about what conservation is all about. Being well informed is also part of saying why it's important to conserve the rhino, because*

*somebody [who] has never seen a rhino is prepared to save money to fly to Africa, specifically … Phinda, to see the rhino and as they come to see the rhino, they will need a place to sleep (… a lodge), and that place to sleep will need somebody to cook, somebody to clean. So those are the details we don't normally look at … So, if they say, 'okay for me to be employed at Phinda it's because, this … guest … has come a long way … I get to serve the person and that is my job'"* (P350, 112:112).

*"… after completing a school or a classroom, … there would be a celebration … and we would be cutting the ribbon and all that. Then you would hear people saying 'thank you Phinda, thank you Africa Foundation, thank you B'. And when I make a speech … I always say 'you know what, great that you saying thank you to us, but the very important people that we must say thank you to is the lion, the elephant, the rhino. Those are the people who attracted the person who donated that money to be able to build this project. So those are the people to thank'. I always try to talk about that, I say 'I'm here on behalf of these people, it's just that when the elephant comes, you run away, so that's why he sent me'. … it's the simplest way of trying to relay the message"* (P350, 112:114).

The last quote on information was slightly different as it referred to the importance of C1 knowing about reserve-related matters: *"You need to update people about what's happening. We sometimes … go out to the trust and then say 'guys, this is how we have done this year'… because they are part and parcel of us. They need to be involved in [what's] happening. Even if they are not involved in management – just keep them updated …"* (P355, 52:52).

Another two quotes also referred to understanding the importance of conservation and tourism in bringing benefits (achieved via providing **information**), but mentioned **education** as well:

*"I think that is one of the questions that I always ask myself, what is it that we can do [to] keep this relationship going and also making sure it doesn't collapse. I think the first thing is education. We need to educate and … make communities [aware of] why it is important to have a game reserve. … People need to benefit from being neighbours of the game reserve. When I talk of education, that is the … conservation lessons. People need to be taught and reminded of why it is important to have game reserve close by. … they are growing every day and there's new people coming in. You need to keep going and making sure that people are aware, and [that] they know you, that you are here, and then they also see the benefits and importance of the protected area next to them"* (P355, 52:52).

*"Good question … it's hard to say. I think perhaps, and this will come through education, is for more people in the community to realise the benefits of having this park here, and again that's only through education. … This will be our biggest objective – [that] people must be able to say why or how they benefit from this park. And if they don't … they should be able to say they know someone that does, perhaps someone in their family. … so, it's not something that they can do, it's something that we need to do. I think the danger … is that we've created very high expectations for ourselves, and so people don't, perhaps, understand this business or this reserve to the full extent, and so there's now an expectation, and if [they] don't get a job or are not involved in Phinda, it can suddenly become 'okay … this thing is not so good for us, we use [the land] better or we need to be able to come and poach or take firewood or whatever'. So, I think that's the danger, and I worry sometimes that we have created a very high standard"* (P357, 96:96).

The remaining quotes related purely to **education**. The two C2 quotes explain the conservation lessons, for example:

*"… if you invest in the youth now you are creating your better tomorrow. … To help them understand, have a positive attitude towards conservation, [we conduct] conservation lessons … in primary*

*schools, where a ranger and a tracker … will go to a school, do a lesson … Then the following day, or whenever they [can] … they'll take 16 kids and will drive them into the reserve for two to three hours. As they drive to the reserve there are also questionnaires that they need to answer as they are observing, and from the lesson they got. I remember one time, … we came across a herd of elephants, there were over 30 and [a child] screamed. I think she was having mixed feelings, she wanted to cry but at the same time she was excited. [At the] … debriefing sessions where we sit back and have snacks and drinks, I was asking her 'how did you feel', she [said] 'I'll go and tell my grandmother that I used to see the elephant in the picture, I saw them today'! ... once you give them the right information and the right lessons they will be able to share it with their grandmothers, mothers, families and the perception out of that [is powerful]. … Now we've improved the program, it's called EEP (Environmental Education Program) … We've got funding for two years, we've partnered with a non-profit organisation called Mpilonhle which accesses a lot of funding from the government. … [It's a partnership] between Africa Foundation, Mpilonhle and &Beyond Phinda. &Beyond Phinda has given us rights to drive through the reserve … and given us one of their rangers who is from the community and has worked at Phinda since its inception. … He's doing two trips a day. … [The learners who were chosen] come back and become champions of the program at the school. We're hoping to do over 45 schools out of all the five communities and that impact – you're looking at almost 10 schools per community and if you can do that now, you can see what the perception is going to be!"* (P350:96:106).

The two C1 quotes stated that more bursaries, and training and education on nature conservation that can lead to employment would make them more positive:

*"… the CLEF bursary scheme that is offered by Phinda should be increased … so that it provides opportunities for more people to … benefit from this"* (P356, 141:141).

*"… he would like to see the game reserve providing opportunities or training for people who can be taken to universities or colleges to learn more about nature conservation … and then be provided job opportunities after that within the game reserve – that will also have a … positive impact to the community"* (P356, 141:141).

Bursaries, conservation lessons, training etc. are all tangibles, with the conservation lessons being highlighted most and certainly a programme that &Beyond and Africa Foundation can be proud of. However, what emerges strongly here is the intangible of communicating the message to communities, of why tourism and conservation is important, and how they benefit from it. C2 appear to be working hard at continuous information provision to C1 leadership and those not in leadership, those new to the community and the school children – on what is going on and why having a reserve matters. This is no easy task. One C2 participant also highlighted the challenge mentioned before in Section 6.3.2, that the downside of a strong successful product is high expectations from C1, which can be a challenge to maintain.

***(b) Involvement/interaction***

This code of 'Involvement/interaction' (C1:0; C2:6) took it a step further than the 'Information' discussed above. It was used when participants mentioned actual involvement or interaction of some sort as a means of increasing positivity. There is some overlap, for example, ongoing communication and the rhino dehorning programme emerged again in these quotes. It is interesting that C1 did not express the

desire for involvement/interaction. C2 participants mentioned the following positivity builders: involvement in rhino dehorning which increases positive perceptions and word of this is spread; tangible infrastructural benefits at Kwa Jobe and working with this community have increased positivity towards Phinda, as opposed to there being negative attitudes towards Mkuze; a sense of ownership (the community knowing the animals belong to them); and more community involvement required at management level.

Two quotes related to the recent initiative of involving tribal authorities in rhino dehorning. The quotes mentioned that: *"… they get informed and understand why this is done and [that this] will create positive attitudes towards conservation, and that's a better way. Just to paraphrase what was said by our late Madiba, Nelson Mandela, is that if you don't involve these communities … I'll say you won't make it"* (P350, 120:120); and *"They participate … They spread the word. I think it's those type of things that we can do, make sure that this keeps going … and they see the benefit of a protected area next to them"* (P355, 52:52). The suggestion to increase positivity is that this sort of initiative should continue, and that the tribal authorities spread the word after being involved in this. There is also a warning in the first quote – lack of involvement could mean the collapse of a protected area. This next quote suggests working together and providing benefits, as well as offering a sobering example of what happens when communities are negative towards a protected area:

> *"I think it is working together, involving the communities that will help a lot. Like for instance, … we went to open a preschool at Kwa Jobe, which is one of the communities outside Mkuze Reserve. So, the chief there stood up and said to his community … 'if you find an impala or nyala from the Parks Board make sure you kill it. If you have to cut the fence, cut the fence. But if you see an impala, a nyala from Phinda please make sure you catch it, you take it back inside the fence, we report to Phinda'. … he was saying 'look at what Phinda has done for us'. … Kwa Jobe is one of the communities that we have been working with a lot so we have done some boreholes, primary schools, preschools there. … [When] I was born – Parks Board was here, but the only thing that Parks Board did was to chase people away from the reserve. The only thing that Parks Board does is that [if] they find people poaching, they will make sure that they shoot them or arrest them …"* (P352, 60:60).

Later, this same participant said *"The communities … are now more involved. They know the animals that are here are their animals. … an incident might be here or there, but not really a big issue as before"* (P352, 70:70). This echoes the above perceived sentiment of C1 towards Phinda.

Finally, two quotes suggested more involvement at management level as a means to increase positivity. The first quote also reflected on the importance of continuous communication, which overlaps with the code 'Information/education'. This quote also highlighted that a gap was developing between C1 and C2, and provided some ideas to address it:

> *"If you make access and participation at the management level, or the discussions at the trust level, [so] that they understand how to run the game reserve, how it operates. … one of the things that I've reinstituted was having the reserve management having a much closer relationship with the community [to] close that gap. Because there was a gap developing and [the community] expressed as much when I met with them. So maybe … if we give the platform and it's utilised – the game reserve*

*[staff] going more to people, to dialogue with them, to talk about what is actually happening, just being in front of the people all the time – … the community [might] find it easier to understand what is taking place, and therefore participate"* (P354, 103:103).

*"You know, it is involvement. … we haven't done it, but it's something that I think we need to start doing – getting them involved in a management plan. They need to know what's happening. You cannot get everyone but you get the key leaders. … You hear their view. They might have something different … that can help you, because it's not the communities that we used to have before. We've got doctors out there. We've got lawyers out there … educated people who can help improve lives and it can improve the relationship that we want to have with communities. … get their view of how they see things … that's just my own thinking. … Let it not be 'I', but let's be 'us' …"* (P355, 62:64).

***(c) Development/infrastructure***

C1 and C2 reflected on 'Development/infrastructure' as an aspect that could increase positivity (C1:3; C2:3). All except one of these quotes related to education-related infrastructure. C2 considered what has been achieved, and that 'Development/infrastructure' is a continuing focus area, while two C1 quotes requested a high school and college respectively. The final C1 quote related to a shopping mall.

The first C2 quote outlined the improvement of facilities that the community already had, and mentioned 150 classrooms that have been built in Kwazulu-Natal (P350, 110:110). The participant also clarified that education is the focus because communities have clearly indicated this to be their priority. The second quote mentioned the building of a special needs school (P350, 144:144), while the third C2 quote is provided verbatim as it tells a powerful story:

*"… this crèche we built in 1999 … – the first crèche we built in … this community … Last year when I went to one of the fundraising events, I shared this story with a picture of this girl. She was one of the very young ones that started with the crèche …, and went from finishing crèche … to the primary school, and at that primary school we built classrooms, … and when she was in high school we did the same, we even put in a laboratory. She did science and from there she got a CLEF bursary from Africa Foundation and Phinda to go and study, whereby in her second year she got government funding. And guess what, seven years later she's a medical doctor! Now that is a story"* (P350, 116:116).

The C1 quotes regarding education follow:

*"I think if Phinda can try to build a college for … learners from these schools, so that they can go and be educated about nature conservation … and go far"* (P353, 165:165)

*"Considering the good relationship that the community and the game reserve have, we would like … the game reserve [to] look in our direction in terms of developing another high school, because we only have one high school in this area …"* (P356, 144:144).

The final C1 quote concerned a shopping mall: *"she's saying she would like to see the shopping mall being built … which might boost the love of the game reserve, if the game reserve is the one that has proposed that, and then more job opportunities will be created out of that"* (P356, 147:147). This highlights the challenge for the reserve when 'love' for it may be dependent on expensive infrastructure. While what has been achieved in this regard is commendable, &Beyond may need to explore more intangible benefits that could prevail if economically challenging times are experienced.

***(d) Employment***

There were five quotes under 'Employment' (C1:2; C2:3). The C1 participants mentioned more employment opportunities as something that would positively influence communities (P356, 138:138); and training and education that could lead to employment within the reserve (P356, 141:141). Two C2 participants also reflected that employment and the creation of more jobs would improve positivity (P355, 52:52 and P357, 100:100). The final C2 quote related to improving positivity by turning negatives into positives and training people for management level: *"That's a very good question. Other than perhaps turning what we've called the negatives [into] positives, [an] increased number of trainees at the highest level of the management of the game reserve – I think that would actually satisfy them. Of course, you're talking perhaps three positions, and how [can] that satisfy the community? Because it might be a little bit far-fetched to say that if you have four more people at the highest echelons of the organisation, then people would be happy. But I'm just thinking that [is] probably one area where you could improve that. Some sections of the community would be happier, but I can't say [that] for everyone …"* (P354, 101:101). This quote captures the complexity of satisfying a community.

***(e) Community projects***

All four responses coded under 'Community projects' were from C2. The community projects were always mentioned in the context of something which facilitates education or interaction, and hence will be viewed as such. The projects mentioned were the rhino dehorning with the traditional leadership and trust members, taking the indunas into the reserve to experience being a guest, and the conservation lessons. An example pertaining to the latter is provided below: *"There are learners who become champions in each school … it's more like an eco-club. … we piloting in five schools [in which] we have actually worked with them before. So, each school we [took] 42 children. Now we're taking the same children, to bring them back – now they are forming an eco-club, because each school has got two teachers who are actually responsible for that program …" (P350:108:108).*

***(f) Enjoyment of reserve***

Three quotes were coded with this code, 'Enjoyment of reserve'. All were from C2, and all from different participants. Two expressed the desire for more community members to be able to access the reserve as a means of increasing positivity. Perhaps a previous request by C1 for dual-pricing (Section 6.3.3.2) could assist in this regard. The third quote reflected on the programme where indunas visit PGR, and the rationale for this.

> *"I think [there] would be a lot more openness in terms of people being able to access the game reserve – in an orderly fashion, of course"* (P354, 103:103).

> *"… it comes back to … getting community people inside this park to experience, and making sure when they leave, that link between the wildlife and … the tourism operations … is there. In other words, when they leave, they say '…we need to look after this wildlife because that's the business of this reserve. Without it we can't benefit'. So, I think the key is for them to see the link between the animals and the land, … and the benefits they get"* (P357, 100:100).

*"I think if they … understand [the tourism process], and that [is] best done [with] people … in leadership structures. That's why, as Phinda, we take the chiefs and indunas to our lodges to … do the game drive … see the animals and everything, but also there is an important factor there that says, 'you know, this is how it looks because somebody is cleaning. Somebody is doing that'. And then they get to sit as guests themselves, treated as guests and … they were like, 'wow'. '[This] means when a person comes here he needs to pay for all of this … somebody has to do the breakfast, everything' and they get to understand … every chief gets … to come and stay at the lodge maybe for two nights with his wife and family. As we do that for [them] (because we can't do for everyone), [they are] able to go back and relay the message … – 'this is why we need to keep [the reserve]'"* (P350, 112:112).

***(g) Other***

In closing the question on increasing positive attitudes towards the reserve, two quotes were coded under 'Other', both from C1. The first stated *"it's good to keep it as a game reserve but I think [for] people who are in the community – maybe they must give us a chance to buy shares"* (P353, 151:151), and the second is a discussion on reserve expansion. One community member would like to see the reserve expanded, which is positive: *"If there were a large area of land that is not in use, I would have loved to see the game reserve being expanded so that it accommodates more animals"* (P353, 154:154). However, another elderly participant interjects that she disagrees, and that PGR already has enough land.

The relative wealth of the Mnqobokazi community in contrast to other communities who are not benefiting as they are, is evident in that there are no quotes under 'Basic needs'. While the code 'Pride in reserve' was not relevant when coding the Phinda data for this question, in other questions a sense of pride (albeit in other words) does emerge. However, this could be something that C2 may want to work on – encouraging the community to be passionately proud of their reserve.

***C. Summary: Increasing positive attitudes towards protected area***

C2 view information, education, involvement and interaction as important positivity builders, and have several initiatives in place in this regard. Central to these is to enable C1 to understand the importance of conservation, and to link wildlife and tourism to the benefits they receive, i.e. to facilitate an understanding of why the protected area is needed. This is no simple task and C2 work diligently at ongoing communication and interaction. The conservation lessons for school children appear to be highly successful, and if rolled out as planned, could become a flagship programme. While being a newer initiative, the involvement of community leaders and trustees in rhino dehorning, also appears to significantly influence those involved. To improve positivity, C2 mention targeting new people to the area, to keep going into the community, to highlight the benefits, and inform leadership regarding what is happening in PGR. These are key intangible benefits which C2 would do well to pursue (some are already happening). Other suggestions from C2 were involving key C1 leaders at management level, enabling more C1 people to be employed at management level, and facilitating more access to the reserve for C1. The challenge of having created high expectations, which could be hard to maintain is

mentioned again. Involving key C1 leadership at management level could help in this regard, as they will gain an understanding of the economy of the game reserve. Building on intangibles may also be a good strategy, which could prevail should leaner times be experienced. Apart from pursuing the intangibles mentioned by C2 (in this paragraph), C2 could encourage pride in, and a sense of ownership of, the reserve. A dual-pricing policy, day visits in the off-season, and special packages for locals that involve day trips or a game drive and dinner (more affordable when accommodation is excluded), etc. could be considered.

Both C1 and C2 emphasise education-related infrastructure as a positivity builder, as well as employment. For education (under 'Information/education'), C1 requested more bursaries and training, while C2 focused on the conservation lessons. It is interesting that while C2 focus on information, involvement and interaction, these do not emerge at all from C1 as aspects that would improve positivity. This could be because they feel they are already getting this. Of interest is that C1 only mention tangibles, C2 mention tangibles currently in place, but their suggestions to improve positivity in future are predominantly intangibles.

Section 6.3.4 contributes towards answering Research Objective 6.

### 6.3.5 Others' views on nature reserve

Table 6.12: Orientation to Question 5: PGR/M

| **Question ID / Code prefix** | **To C1** | **To C2** | | **Method** |
|---|---|---|---|---|
| Q5 / OV=Others' views | Y | N | What do your friends and family think about this nature reserve? | FGI |
| **Research Objective** | | | 3 | |

***A. Overview: Others' views on protected area***

Table 6.13 presents the data for this question. C2 was not asked this question since it aimed to gain a wider understanding of community views on the nature reserve, from community members themselves.

Table 6.13: Code frequencies for 'Q5 Others' views': PGR/M

| **CODE (OV=Others' Views) (Neg=Negative) (Pos=Positive)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** |
|---|---|---|---|
| OV: Neg: Want employment | 2 | 0 | 2 |
| OV: Neg: Want resources inside | 2 | 0 | 2 |
| ***TOTALS FOR NEG:*** | ***4*** | ***0*** | ***4*** |
| OV: Pos: But want employment | 0 | 1 | 1 |
| OV: Pos: General | 1 | 3 | 4 |
| ***TOTALS FOR POS:*** | ***1*** | ***4*** | ***5*** |
| **TOTALS** | 5 | 4 | **9** |

Fewer views were generated in answer to this question, with Focus Group 1 appearing more negative (4 Negative; 1 Positive); and Focus Group 2 more positive (4 Positive; 0 Negative). The negative comments all came from Focus Group 1 and related to being negative because of wanting employment, and negative because of wanting the resources inside PGR. However, one cannot conclude they are more negative than Focus Group 2 because, in each focus group, the researcher asked for a show of hands to indicate how many of their friends and family are positive. Both groups reported that the vast majority are positive. These responses [one (1) for each focus group] were coded under 'OV: Pos: General'. In addition, Focus Group 2 provided two other general positive comments (under 'OV: Pos: General'). Further to this, Focus Group 2 produced one quote that alluded to being positive but wanting employment. Discounting the data where the researcher asked for a show of hands [i.e. the one (1) coded for each focus group under 'OV: Pos: General'], there are four negative comments from Focus Group 1, and three positive comments from Focus Group 2. Based on the responses to other questions in this chapter, and the fact that the composition of the two focus groups and the atmosphere during the interviews was very similar, nothing conclusive can be drawn from this, except that from C1 overall, there are a few negative views. The latter do need to be taken cognisance of.

Four of the 14 codes developed for this question (across all three case studies) were used in coding the C1 responses of the PGR/M case study, generating nine quotes in total. The codes 'OV: Pos: General' and 'OV: Neg: General' relate to **general** statements about being negative or positive. The other codes reflect a negative attitude about a specific aspect (for example we are negative **because** we want to have the opportunity to reach management level) or a positive attitude (for example, we are positive **but** want employment). The views provided by Mnqobokazi participants relate to employment and natural resources.

### *B. Specifics: Others' views on protected area*

#### *(a) General positive statements*

In Focus Group 1 (consisting of 12 participants), eight indicated that their friends and family are positive regarding the reserve, two indicated that they were negative and two abstained from providing an opinion (P353, 204:206). In Focus Group 2 (also 12 participants), all but one individual indicated that the people they know within the community are positive (P356, 168:174). The other general positive comments relate to the community catching poachers because of the good relationship, and a reflection on a good relationship in contrast to the relationships they have with other protected areas nearby:

> *"… some people who were going for rhino poaching, they were captured by the community themselves because of the good relationship they have with the game reserve"* (P356, 156:156).

> *"Phinda's got a good image within the community, whereas in our mind we still got that of other game reserves [with] who we do not have a good relationship"* (P356, 162:162).

Overall, this constitutes a very positive response.

***(b) Positive but want employment***

The final allusion to positivity regards the fact that others like the reserve but that unemployment and hunger are a problem. An extract follows: *"… It's not that people do not like the game reserve, but we have a problem of high level of unemployment and people are hungry …"* (P356, 153:153). The positivity towards Phinda is clear, and also surfaced in the quotes under 'General positive statements'.

***(c) Negative because want employment***

The two quotes coded with 'Negative because want employment' relate respectively to supplying jobs to outsiders (people not from the community), and lack of opportunity to advance to management level. The latter supports what was stated by a C2 participant in the previous question:

> *"Some people feel very negative about the game reserve itself when it comes to job opportunities because it provides job opportunities for people who are not from [here]. But then people from here, sometimes they get called out to come and do some training, a few weeks or a few months, but at the end of the day they are not getting employed, which it seems like it does not belong to us and the community, it belongs to somebody else – who, we don't know"* (P353, 190:190).

> *"… there is lack of transformation within the employment opportunities of Phinda, because some of the people who are working at Phinda from this community or around these communities are only eligible to work as waitresses and bartenders and all those junior positions. They are not … given an opportunity to take on something like leading or managing the staff …"* (P353, 195:195).

***(d) Negative because want resources inside***

Two quotes were coded with the code 'Negative because want resources inside'. Of note is that the participant commenting on medicinal plants, requested education on how to harvest these plants without eradicating them.

> *"… His [relative] is a traditional healer and they once had a conversation regarding Phinda Game Reserve and what came out there is that he sometimes needs some herbs from the game reserve, but there is limited access … [Phinda] doesn't provide … permission for the community to access some of those things. … they are expecting … the game reserve to teach people on how they can use the trees without eradicating them … So, he believes that the … reserve needs to revise their policies in terms of giving people access and allowing people to have some form of ownership so that they can feel part of the game reserve"* (P353, 187:187).

> *"When they were having some conversation [about] Phinda Game Reserve, [what] always pops up is why sometimes Phinda cannot … slaughter some of the excess animals that can be consumed by humans. Maybe slaughter some of them for … those whose households need food, because some people go to bed without food, so they wish that the game reserve should look out for these people"* (P353, 192:192).

***C. Summary: Others' views on protected area***

This question was only put to C1. In general, the response is very positive. Phinda has done well in winning the community over, as evidenced by the good image that participants have of PGR. Participants reflect that, while happy with Phinda, the same cannot be said regarding the other reserves nearby.

They provide the example of the community catching poachers themselves due to the good standing of the reserve.

All the specific comments relate to employment (3) and natural resources (2). Four distinct negative perceptions are mentioned, while the fifth is coded under 'Positive but … want employment'. These need to be taken cognisance of. Employment is requested, as well as mention made of non-locals being employed, and lack of opportunity for locals to rise to management level. This aligns with comments from C2 under 'Q4-3 More positive'. These results also concur with Muzirambi (2017) who examined perceptions in communities around Phinda, and found participants reporting that locals seldom reached higher level positions and that outsiders were given preference for jobs. Regarding natural resources, there are requests for access to medicinal plants and bush meat for households in need.

Section 6.3.5, together with Section 6.3.2, contributes towards answering Research Objective 3.

### 6.3.6 Responsibilities towards protected area

Table 6.14: Orientation to Question 7-5: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q7-5 / RP=Responsibilities | Y | | Do you have any responsibilities for this nature reserve? If you do, how do you feel about these? | FGI |
| | | Y | Do the local community have any responsibilities for/towards this nature reserve? If they do, how do you think they feel about these? | II |
| **Research Objective** | | | 5 | |

***A. Overview: Responsibilities towards protected area***

Table 6.15 outlines the data collected for this question from C1 and C2 participants.

Table 6.15: Code frequencies for 'Q7-5 Responsibilities': PGR/M

| | | | C1 | C2 |
|---|---|---|---|---|
| **CODE (RP=Responsibilities) (LC=Local Community)** | **FOCUS GROUP 1** | **FOCUS GROUP 2** | **FOCUS GROUP 1 & 2** | **INDIVIDUAL INTERVIEWS** |
| RP: Actions to encourage protection | 0 | 1 | 1 | 10 |
| RP: Ideas from LC to encourage protection | 4 | 3 | 7 | 1 |
| RP: LC afraid to report | 2 | 2 | 4 | 1 |
| RP: LC protect reserve | 0 | 4 | 4 | 8 |
| RP: Other | 3 | 0 | 3 | 1 |
| RP: Who to report to | 0 | 0 | 0 | 2 |
| **TOTALS** | 9 | 10 | **19** | **23** |

Both C1 and C2 contributed significantly to this question (C1:19; C2:23), with the contributions from each focus group being almost equal (FG1:9; FG2:10). 'LC protect reserve' (i.e. actions taken by

community) (C1:4; C2:8) and 'Actions to encourage protection' (actions usually initiated by the reserve to encourage protection) (C1:1; C2:10) were the most utilised codes. These are followed by 'Ideas from LC to encourage protection' (i.e. ideas proposed by the local community to increase protection of the reserve (C1:7; C2:1). There were five quotes regarding 'LC being afraid to report', with four of these emanating from C1. Four quotes were coded under 'Other', and two under 'Who to report to'.

***B. Specifics: Responsibilities towards protected area***

***(a) Local community protect the reserve***

The coding rule for the code 'Local community protect the reserve' was that the quotes needed to relate to actions taken by the community to protect the reserve, and could also be used when a participant referred to himself/herself informing the community about the importance of the reserve and conserving its animals/plants, etc. Four quotes were from C1, and eight from C2.

Out of the 12 codes, seven relate to **the community taking action against poachers** (C1:2; C2:5). Examples of the C2 quotes are provided first. The second quote refers to an incident when community vigilance led to the successful arrest of poachers from Mozambique.

> *"Many of [the informants] are community members or staff from these communities, and so they do provide information, whether it's poaching or other crimes"* (P357, 103:103).

> *"I think the way of looking after it is making sure that people don't do poaching … Of course, there's a fence and all that, but … I always say 'the fence is mainly for the animals not to cross, to damage anything, but the real fence is the community' … That's the better one [to] have, because … they know each other, they have information. In the community, somebody can come and do poaching here and run away to the community. If they don't want to tell you who is that person, … but if you have them on your side then they will always do that. So, I think the main responsibility for the community is to protect. … There [are] informants … in the community, who are gathering information … I remember 2014 or 2015, … I think we had five tip-offs that they got, and guys went to do an ambush … and caught the guys ..."* (P350, 122:156).

In answer to a follow-up question, "Do they feel they have a role as a protector", another C2 participant said: *"I think that is something they do often. Two, three years ago … the [Mnqobokazi] community themselves … caught three poachers with a big rifle, then they called us to say 'hey, we've got these guys, they were coming into Phinda to poach'. And we haven't had any incident … of rhino poaching in the boundaries with the communities. There's nothing like that. We've had incidents … in the main road or that side … and … definitely, they do phone us. That's why we catch poachers coming in, because people will say 'hey, there is a suspicious [car] that is driving up and down here, people that we don't know' … They know who to call and we've intercepted such things. I think definitely, they're playing a big role. They also know that they have to play it. I think they associate Phinda as one of their family … they even chased [the poachers]. The one car managed to [get] away. They chased that car all the way up to … just communities themselves. We found a rifle, there was an axe, bullets and all that stuff …"* (P355, 75:77).

This quote touches on a key fact – that the community know who to call if they suspect a problem, and that this person is their link to PGR.

A further comment confirming their role as protectors was: *"Most of the people that are here, their families are out there. Knowing that your son works for Phinda and you have picked up information that somebody is going to Phinda to do something dirty, you'll obviously … tell your son 'there's a problem coming'. … through information, there's been lots of poachers that have been caught before … any rhino [are] killed"* (P352, 87:99).

Examples of quotes from C1 relating to the community protecting Phinda follow:

> *"To prevent animals or nature to come into extinction we should, as the community ourselves (because we know people who are plotting to do rhino poaching, for example) … discourage such activities … if we doing it as a community, nobody can take that away from us"* (P356, 285:285).
>
> *"… I can report just for one reason, just to set an example so that other people will know exactly that poaching is not good. Not good for us. Not good for our nature"* (P356, 295:295).

These quotes tell a story of positive connections to the reserve via informers, staff and their families, and the general community. There appears to be a clear sense of responsibility in this regard. C1 know who to call in these cases and successful arrests have been made in the past.

Other actions taken by the community to protect the reserve, that are mentioned in this research, are now discussed. A C2 participant alluded to the community trusts which **contribute towards the running costs of the community guards** initiative, in which the guards are locals: *"… in both these communities, we employ 18 field rangers or community guards, they're stationed in the community. … they get the wages paid by the government, but both trusts actually contribute quite a lot towards the running cost of that. So, that's one way of being responsible for the protection of … [the] community … and for us as well"* (P357, 105:110). Another C2 interviewee spoke about the **symbiotic relationship** between the community and Phinda: *"I think they see that responsibility as a relationship … they see Phinda as part of their family. They know for sure that if Phinda has to go one day, 350 people will lose jobs, [of] which 80% or 85% come from their communities. Also … they're benefiting through different ways – through the bursary schemes, through … rentals. To them they're seeing this as a golden egg that they have to protect. … that's what they say – when you go to them they will tell you that if it wasn't for Phinda, we won't be here …"* (P355, 96:96). The final C2 quote reflects on **poaching being lower at Phinda because the community take this responsibility seriously, viewing themselves as active protectors**: *"The first responsibility, for me, is to help protect the asset, which is the game reserve … And they understand that responsibility, because … everything that we do together with them is communicating that message … – that they are active participants in the preservation of these natural resources. … the fact that there's [a] greater working relationship between the game reserve and the people is indicative of the very fact that they understand that responsibility. And also, … by comparison, as I'm told, the rate of poaching at*

*Phinda compared to other communities or other game reserves, is such that there's huge disparity … That, to me, is a reflection of the acceptance of the responsibility by the community …"* (P354, 105:107).

The two remaining C1 quotes coded with 'Local community protect the reserve' concern community members who have taken it upon themselves to **educate on the importance of conservation.** An example follows: *"Since I have visited Phinda and learned a lot about nature, I have now become an ambassador in terms of spreading information about nature conservation to other people around, so that they know that we as human beings and nature (particularly trees and animals) need each other. They need us for survival, we also need them for survival"* (P356, 279:279).

***(b) Actions to encourage protection***

Eleven quotes were coded with the code 'Actions to encourage protection' (C1:1; C2:10). Seven of the ten C2 quotes link with **interaction/involvement between the reserve and the community**. In other words, various modes of interaction/involvement appear to be key in encouraging protection of the reserve. Two of the more general comments here related to interaction with the community to assist them in understanding that they are active participants in conservation and to encourage ownership, for example: *"I think involving communities and making them feel the ownership … helps, because at least everyone is on the same page"* (P352, 100:100). Four comments concerned continuous open interaction with the community, namely: a suggestion that the management team regularly introduces itself to the community and explains their roles; involving C1 leaders in key events, such as when introducing new rhino to the reserve, as well as encouraging the community to see the benefits; the tribal authority figures using community gatherings to reiterate the importance of protecting their asset, and again highlighting benefits; and working with key leaders and obtaining information from them. The specific quotes are provided in this order below:

> *"I was actually raising a request to say I will need us to go to the community, as Phinda management – all different departments, like quarterly, just for me to introduce you again …"* (P350, 163:163)

> *"Two categories of people there. First category, they feel great because of the understanding they have, the direct benefit they see and the involvement they have in these processes, [for example] if there are rhino that are going to be introduced … for them to be invited to come – the leadership and the indunas [to] make them feel part of it. … the second category will always feel like it's [not] for their gain … because they [are] not really impacted directly [by] whatever is being done from this side [for] the community"* (P350, 198:198).

> *"In community gatherings [the tribal authorities] will always try and … caution people against poaching. And obviously highlighting the benefit of having an asset like that on their doorstep, in fact, which they own now, so to speak. So, yes – reporting, conscientising and [creating] awareness in all the gatherings they have …"* (354, 117:117)

> *"We work with certain people – … the trust [and] tribal authorities … I won't say there is a responsibility like they have to do one, two, three, [but] it's working with those people and getting information from them [regarding] how people feel at the time. Like if people are not happy, the … trustees will come and say 'hey, guys, there is one, two, three that we think people are not happy*

*[with] and if you guys can improve in these', for example, … coming to communities often, visiting tribal authorities, [attending] tribal court …"* (P355, 73:73).

It is commendable, and indicative of the good relationship, that the tribal authorities themselves take on the responsibility of spreading the message of the importance of PGR to the community.

The other C2 comments are **tangible actions**: using an outside fund (which is jointly managed by a group of people) to offer rewards to informants (P357, 103:103); the trust contributing to community guards/ field rangers who protect both the community and reserve (P357, 105:105); and the trust contributing towards park development. The latter two are noteworthy because they are actions coming from the community themselves, albeit with involvement from &Beyond and Africa Foundation. By helping to pay for park development, the community trust invests in PGR, which would increase their desire to protect it. For example: *"As landowners, I think in a huge way they are responsible for the upkeep and the sustainability of this park. More so with Makhasa. They own infrastructure – lodges. Mnqobokasi doesn't really own lodges but … we discuss things with them. They understand that even though the lodges might not belong to them, … they need to ensure that those lodges are functioning, because they know that if those lodges close down … they won't be able to get rentals from us. So, they know that they need to look after the business. … they need to contribute towards some of the costs of [the water pipeline], because it's a huge project. Each trust has a fund that's been set up and there's quite a bit of money … to use for the development of this park. … Two pieces of land came into this park about 10 years ago [and] they used some of the money for that ... [Another] farm is about to come into the reserve, so they had to fence that area, …. they've done all the alien plant control, bush clearing. We're busy with big community contracts there. We did a game count. They have now agreed to have to put in R1.4 million worth of animals, so all that money comes out of a development fund that has been set up for them [and] jointly managed by us and them … But there's another thing that we're busy with Mnqobokasi – just that little piece of land [is] probably worth about half a million rand a year for them. And that's why it's been a long process to get them to understand – for them to pay for some of that stuff … in order to reap the rewards … down the line. [The fund must be used] for development – it has to be in the park … We've got MOUs[36] on how we govern that fund"* (P357, 111:125).

Finally, the single C1 quote is from a community leader, **encouraging the community to look after Phinda** because they need it: *"As a community leader I have now become a custodian of the game reserve, because whenever there is a community meeting I always tell people that [Phinda] is like our money that we have here, around Mnqobokazi, because there is no other big firms or facilities that we depend on. So, I always encourage children to work hard on their school work so that they can … get bursaries from Phinda Game Reserve"* (P356, 274:274).

36. Memorandum of Understanding.

***(c) Ideas from local community to encourage protection***

There are eight suggestions coded under 'Ideas from local community to encourage protection'. Seven are from C1. The only quote from C2 refers to a suggestion from the Mnqobokazi chief, and is hence coded here.

One participant suggested that the young people of Mnqobokazi **run an anti-rhino poaching campaign** (P353, 285:285). Another requested **anonymous reporting of poachers**: *"We should be reporting [poachers], but I think it should be done anonymously. If there is an anonymous line, then the game reserve or the authorities themselves can do their own investigation"* (P356, 298:298). The C2 participant expressed that *"… one of the things that [the chief of Mnqobokazi] said to me was he wants to get feedback on the statistics of … poaching incidents at Phinda [and] a breakdown of how many people from Mnqobokasi have actually been affected by that. Because he's saying: 'We want to make sure that we work with the game reserve to cut the problem, but without information we don't know. You get people saying 'people have been caught poaching', but we don't know … which community they belong to. So, give us the statistics, so we can proactively take those steps'. ... we push the message all the time when we have gatherings [but] that was coming from the chief"* (P354, 109:109).

Two quotes related to requests that Phinda improve fencing and take responsibility for escaped animals that cause harm/damage. The participant's logic is that, in order to get the community to protect the reserve, Phinda needs to resolve these matters. One lady requested better fencing after an incident where, while on her way to work with other employees, a rhino escaped from the game reserve and got in front of them, creating a dangerous situation. They escaped without harm and did not report the incident (P353, 310:310). The other quote follows: *"… management should take responsibility for some cases … the leopard, if it escapes … then maybe it kills the livestock, like goats … which people own for their livelihood, and [the reserve] say they are unable to pay for the goats [because] they cannot set boundaries for the leopard – even if they have a fence, the leopards can always jump. And so, they are failing to take responsibility for the actions of the animals that they are keeping"* (P353, 313:313).

Finally, three C1 participants conversed concerning the **importance of environmental education to encourage protection**. One of these reflects on the power of visiting the reserve: *"I think the best way to conserve the nature … is educating the people about the environment. … Because if you hear that there are people from the same community, maybe a few kilometres away from Phinda but they [have] never visited Phinda, they don't know the elephant, they don't know the lion – it's a disaster"* (P353, 286:286). The remaining two talked about teaching children to conserve trees and animals within their own communities, and that this too, is part of conservation:

> *"I've already started giving children some educational programs teaching them not to destroy trees, but to look after trees [as] that is another way of conserving nature"* (P356, 276:276).
>
> *"It's also part of nature conservation [to] instil in our learners, like usually when they see a frog in the classroom they will take stones and throw them at it. But now when you tell them 'no, you just have*

*to guide it so that it goes outside, because this is harmless. A chameleon is harmless. … you don't have to kill [a snake] – you can guide it and it will go outside peacefully'. So, it's the nature conservation lessons that we give to them. And it doesn't end here, it's also extended to our families, everybody"* (P356, 277:277).

***(d) Reporting poaching***

Under the code 'Local community afraid to report', there were five quotes (C1:4; C2:1). The fear related to reporting poaching was evident in how they answered the question and the body language and response of the group. C1 answered hesitatingly, often with nervous laughter interspersed. All four referred to being afraid to report. Examples follow:

*"This question is … not easy to be answered because these things are sensitive. Once you report somebody who was maybe dealing with the rhino poaching, only to find at the end of the day this person will spend his life in jail, so this thing is very sensitive. For me, I can say, I cannot report anybody, but Phinda itself must try to make their security tight so that people are not able to get inside"* (P353, 297:297).

*"To be honest, we are scared of doing that, but it's very important that you … report. ... So, he's saying as much as we would like to do that, there is fear, especially in terms of exposing people. Because at the end of the day you will have to become a witness for that case …"* (P356, 287:290).

The C2 participant touched on one possible solution to this fear, namely anonymous reporting, which was also suggested by a C1 participant under the code 'Ideas from the local community to encourage protection'. This C2 quote also echoed the fear expressed by the community participants: "*You know [not having anonymous reporting structures] – that's a gap, that's a loophole. The gap is that the community wants to report but they are not sure – 'If I report what happens, maybe this person will get to know I was the one and then [I am] in trouble'. It's still a work in progress but I think that will help us. … [We] get so busy … that we don't get to sit and say 'there's a gap there, how do we close it?' … that is one thing that needs to be dealt with because people, even myself, wouldn't want to be exposed …"* (P350, 159:161).

Regarding the code '**Who to report to**', a C2 participant mentioned that C1 know the line to call, and that they are playing a big role in this regard (P355, 75:75). Another C2 interviewee touched on the risk of reporting, and that they try to minimise those in the know: *"… we [are] trying to avoid that many people will know how things are done. Some people will come to me and say, … 'I know of the people who are doing one, two, three', and I will say 'don't disclose them to me, phone this number' and they will speak to that person. So, the only person who knows is … I don't even want to know …"* (P350, 168:168). Other quotes under codes above also mention that C1 are aware of the reporting structures.

***(e) Other***

Continuing the discourse on poaching, an interesting discussion ensued in Focus Group 1, regarding **when to report poaching** (coded under 'Other'). They do not relate to being afraid to report, but to individuals not wanting to report minor offences. All three responses from different individuals are worth noting, as something which C2 needs to be aware of. The discussion begins in Zulu and there is nervous laughter

before it is translated: *"As much as we would not encourage poaching or illegal entrance into the game reserve, but in some instances it would depend … for example, … a traditional healer … might need some herbs from the game reserve, but … access is not offered by the game reserve itself, so he will [be reported] if he goes in illegally and gets those herbs for his medicines and stuff. And also, … some communities or households are poor and sometimes go to the rural areas. So, if those people would [enter the reserve to get] something to eat, they wouldn't report them. They are not encouraging poaching, but … the game reserve has to come and meet people halfway ... Because of some reasons he gave, he wouldn't report anybody"* (P353, 288:295). The next two quotes reflect that it depends on what animal is poached whether one reports it or not:

> *"… it depends what kind of an animal it is [whether they will report]. If it is a springbok, they will eat it, if it's a lion [they will report]"* (P353, 300:303).

> *"He's mentioning that he will report rhino poaching because that is a criminal offence. Other than that, people are going hungry"* (P353, 304:304).

This reluctance to report minor offences was a noticeable difference emerging between Focus Group 1 and 2, but it could merely be due to the topic arising in Focus Group 1, but not in Focus Group 2. However, it is interesting that Focus Group 2 are also strong on 'LC protect the reserve' – where they made references to reporting poaching and teaching environmental awareness, while Focus Group 1 had no quotes under that code (FGI 1:0; FGI 2:4). This was the other noticeable difference between the two focus groups.

The final quote coded under 'Other' revealed a sense of responsibility towards the financial side of managing the reserve. A C2 participant described an incident of a few years before when staff wanted to strike due to wage negotiations. However, someone in the community persuaded them to see that Phinda could not offer more when lodges were not running at full capacity, and that if they pursued their demands, it could result in higher wages, but with retrenchments (P352, 74:82).

### *C. Summary: Responsibilities towards protected area*

In answer to whether the community has responsibilities and how they feel about these, both constituencies participated actively, indicating that C1 have important responsibilities which they take seriously. The sense of custodianship is clear.

In total, across all the codes in this question, 19 quotes related to poaching – the community taking actions against poachers; fear of reporting; who to report to; and when to report. On the positive side, C1 seem to have a heightened sense of responsibility, knowing that they are part of protecting the reserve – as informants and even catching poachers – and they know who to contact in this regard. The lower poaching rate at Phinda attests to the success of having the community on your side, and benefits flowing, which the community want to protect. On the negative side, there is certainly a fear of

reporting, and a reluctance to report minor offences. Regarding the latter, perhaps C2 can investigate assisting households in dire need (identified by key community leaders), and consider dealing differently with subsistence poachers (perhaps a return to the practice of letting minor offences be dealt with via the tribal authority).

Besides actions against poaching, C1 protect the reserve by: the tribal authorities communicating the importance of PGR to the community at community gatherings; contributing to community guards and park development (via the trust funds); and some having taken it upon themselves to teach others regarding the importance of conservation – that nature and people need each other for survival.

Regarding 'Actions to encourage protection', the key seems to be interaction/involvement between reserve and community:

- with community leadership – continuous interaction and involvement in key events, as well as getting information from them regarding shortcomings in the relationship; and
- with the wider community – continuous communication, reminders of benefits, and encouraging them to see themselves as active participants in protecting the asset. This responsibility is shared by tribal authorities and staff from Africa Foundation and &Beyond.

Under ideas from the community to protect the reserve, the importance of environmental education is clear and C1 request Phinda to take more responsibility for escaped animals.

Section 6.3.6 contributes towards answering Research Objective 5.

### 6.3.7 Benefits due to having protected area near your home

Table 6.16: Orientation to Question 8-6: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q8-6 / B=Benefits | Y | | What are the benefits of having this nature reserve near to your home? Which of those benefits are most important to you, which are least important? | NGT |
| | | Y | What are the benefits to the local community of living near this nature reserve? Which of those benefits do you think are most important to them? Which are the least important? | II |
| **Research Objective** | | | 4 | |

The tools used for 'Q8-6 Benefits' and 'Q9-7 Losses' were different from the previous questions because they involved the use of NGT, where C1 participants generated notes, while the same questions were put to C2 in the form of individual interviews (as per the previous questions) (refer to Appendix E for details). For the NGT, Focus Group 1 and 2 joined together. Each note was captured as a separate document and coded within that document in Atlas.ti. Fifty-four documents were produced from the 54

notes generated in the PGR/M case study. Thirty-five of these relate to 'Q8-6 Benefits' and 19 to 'Q9-7 Losses'.

The questions on benefits and losses contain three sections each, namely the **category**, the **category place**, and then the **specific benefits and losses** (Sections 6.3.7.1 to 6.3.7.3 respectively for benefits, and Sections 6.3.8.1 to 6.3.8.3 respectively for losses).

***A. Overview: Benefits due to having protected area near your home***

The benefit categories were initially determined by the participants. When the researcher developed the coding system for this question, she coded the benefit categories to a finer level of detail. Both are discussed below.

In terms of the category place (ranking), C1 elected to have two tie in both first and second place, hence there are five top benefits, as determined by C1's ranking: 'jobs' tied with 'skills and programmes' in first place; 'bursaries/education' tied with 'schools' in second place; and 'reserve tour' in third place. The ranking from the C2 interviewees differs slightly amongst themselves, and in comparison to C1. C2 concur with C1 on education and employment, and to a lesser degree on skills/training. C2 differ, however, in mentioning healthcare, rental income and exposure to the outside world.

Moving away from the ranking to specific benefits, C2 mentioned more benefits than C1, with C1 highlighting eight types of benefits, and C2, 12. In total, C1 produced 35 notes (i.e. quotes) containing benefits, while C2 had 51 references in total to benefits (quotes from the interviews). C1's highest counts were 14 for schools and higher education benefits and nine for jobs. For C2, it was 11 for sponsorships for community facilities, and eight for schools and higher education.

Based on ranking by both C1 and C2 as well as counts, education and employment dominate as key benefits.

### *6.3.7.1 Benefit category*

All the benefits that C1 participants generated (each one written on an individual note) were pasted onto a large flip chart page by participants, who then grouped them accordingly. That is, all notes relating to jobs were placed in one column, all those relating to skills and programmes in another column, and so on. The researcher asked the participants to name each category, and this is what the 'Benefit Category' codes refer to.

When the researcher coded the data, she attempted to code to a finer degree, and thus changed some category names. However, the original category as awarded by C1 participants was captured in its own

code set in Atlas.ti with the prefix 'B Cat', for example 'B Cat: Schools'. These are depicted in Figure 6.5, with the blue numbers referring to the category placing, which is discussed in Section 6.3.7.2. Figure 6.6 displays the researcher's categories. All categories named by C1 still exist within the researcher's categories, but with a different structure. These categories take into account the data from C1 **and** C2, and constitute the coding frame for this question.

As explained in Appendix E, this data was explored via network views in Atlas.ti, to produce Figures 6.5 and 6.6.

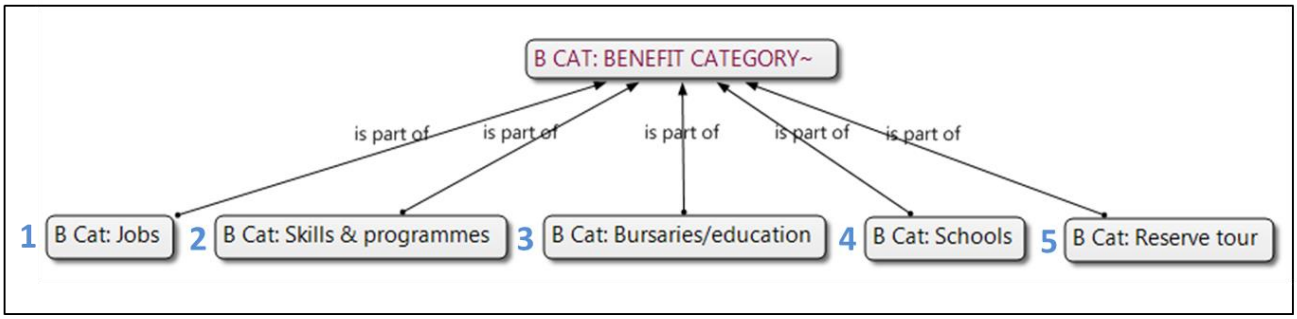



Figure 6.5: PGR/M benefit categories as determined by C1 participants according to number of notes

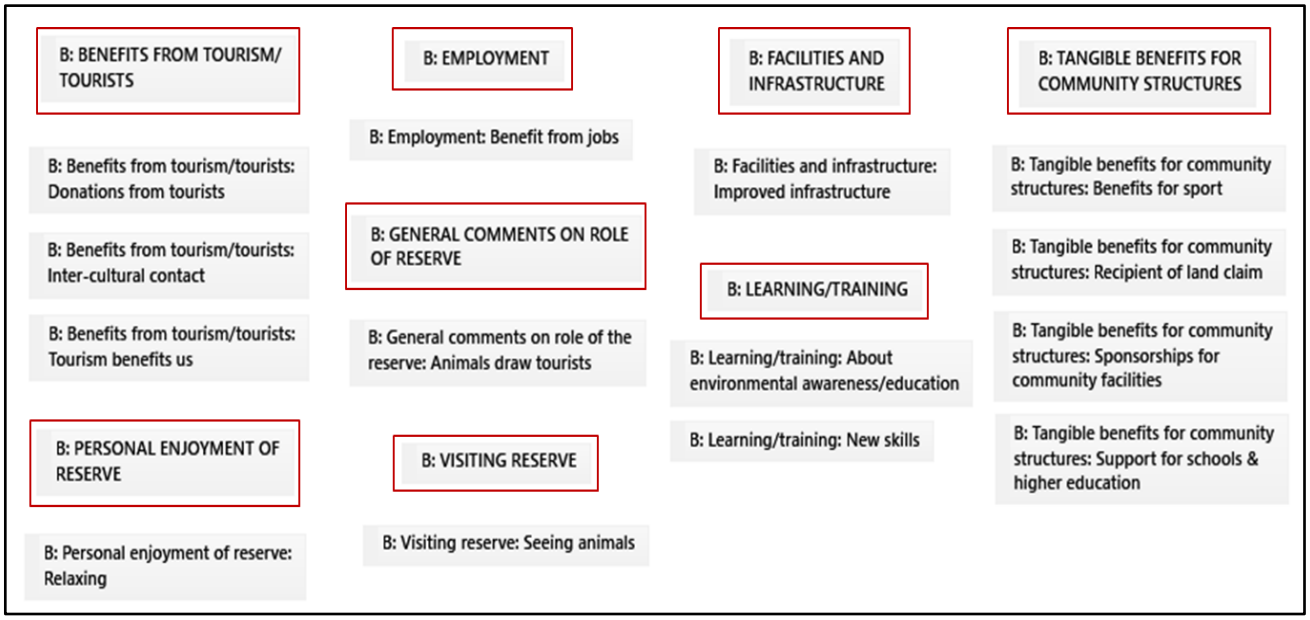



Figure 6.6: PGR/M benefit categories as determined by researcher during coding

### *6.3.7.2 Benefit category place*

After participants had determined categories, the notes in each category were counted, giving an importance weighting to each category, as indicated by the blue numbers in Figure 6.5. For example, 'Jobs' (which had nine notes) was placed first, above 'Skills and programmes' (with its eight notes). However, before accepting jobs as the most important benefit to C1, the researcher asked the group if this was indeed the case for each category and its placing. The group was then given opportunity to vote on their order of preference (i.e. now ranking the categories). In the case of benefits, the C1 vote

changed the order depicted in Figure 6.5 to: 'Jobs' coming tie with 'Skills and programmes' in first place; 'Bursaries/education' tie with 'Schools' in second place; and 'Reserve tour' in third place. The latter refers to visiting the reserve. The benefit category placing/ranking by C1 as per their vote is shown in Table 6.17. The results for losses are discussed in Section 6.3.8.

Table 6.17: PGR/M benefit category placing: C1 compared to C2

| CATEGORY PLACE (According to C1 vote) | C1 NOMINAL GROUPING TECHNIQUE | C2 INTERVIEW 1 | C2 INTERVIEW 2 | C2 INTERVIEW 3 | C2 INTERVIEW 4 | C2 INTERVIEW 5 |
|---|---|---|---|---|---|---|
| 1 | Jobs (9) | | 1. Education | 1. Employment | 1. Employment | 1. Exposure to outside world |
| 1 | Skills & programmes (8) | | 2. Primary health care | 2. Education & healthcare | 2. Rentals from PGR leasing land | 2. The EEP in schools |
| 2 | Bursaries/education (7) | | 3. SMME development | 3. Rentals from PGR leasing land | | |
| 2 | Schools (7) | | | | | |
| 3 | Reserve tour (4) | | | | | |

* Number in brackets is the number of notes produced by C1 participants. C1 also identified 'Crafts' (3 notes) and 'Clinics' (2 notes) as categories but chose not to vote on them because they do not have a craft market in their community, and the clinic was built by government.
* Where C2 interviewees felt it was not possible to rank, cells are left blank.

The five C2 interviewees were not asked about categories, since they were not producing notes as a group that then needed to be ordered. C2 were asked in the interview to name the benefits and losses which they thought impact the community, and then to attempt to rank them in importance. To capture individual C2 opinions on benefit ranking, each individual interview has its own column in Table 6.17. Some C2 participants did not feel they could rank the benefits. In these cases, the cells are left blank. One C2 participant made the following pertinent comment on ranking benefits: *"As to which benefit would be more important for them, it depends on which group you talk to. For unemployed, they would say jobs is number one … For students, they'd say 'if I can get a bursary, that for me is absolutely critical'. And for young ones, coming from the era where they were … living under trees … it would be having a shelter over their head. And also, being able to link to the world. All the technology that they see via television happening in urban centres … I'm sure they would love to have that in their own neighbourhood. … Other members of the community would say: 'Well, farming. If we can be assisted with farming implements, tractors …'. Others are entrepreneurs, others want to advance their education, others want to up-skill. So, it would depend on which section of the community you talk to. But I know that job opportunities is probably going to rank the highest. Because with job opportunities, people can actually do almost all the other things"* (P354, 119:119).

For C1 participants, the top benefit categories decided by the group were jobs, skills and programmes, bursaries/education, schools and visiting reserve (reserve tour). The ranking from the C2 interviewees has similarities, but each participant differs slightly. However, cumulatively for C1 and the C2 participants, employment and education emerge as strong benefits.

### *6.3.7.3 Specific benefits*

It may be helpful here to refer back to Figure 6.6 which depicts the hierarchy of benefits which emerged as the coding system was developed. It only shows the codes relevant to Phinda. Table 6.18 below shows the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most important benefits overall, from the perspective of **both C1 and C2** (the top five benefits according to number of quotes have their titles and totals in bold). Fewer quotes from C1 are used here to analyse the data because all C1 quotes came from notes, where participants made use of brief sentences or one-word answers (such as "*Jobs*" and *"Knowledge about environment"*). To assist in demonstrating the wider picture, the totals for each code group heading (for example, 'Benefits from

Table 6.18: Code frequencies for 'Q8-6 Benefits': PGR/M

| **CODE FREQUENCY** (B=Benefit) | **C1 NOMINAL GROUPING TECHNIQUE** | **C2 INDIVIDUAL INTERVIEWS** | **TOTALS** |
|---|---|---|---|
| B: ACCESS TO NATURAL RESOURCES | *0* | *0* | *0* |
| B: BENEFITS FROM TOURISM/TOURISTS | *0* | *7* | *7* |
| B: Benefits from tourism/tourists: Donations from tourists | 0 | 2 | 2 |
| B: Benefits from tourism/tourists: Inter-cultural contact | 0 | 4 | 4 |
| B: Benefits from tourism/tourists: Tourism benefits us | 0 | 1 | 1 |
| B: DESIRES/NEEDS | *0* | *0* | *0* |
| B: EMPLOYMENT | *9* | *5* | *14* |
| **B: Employment: Benefit from jobs** | 9 | 5 | **14** |
| B: FACILITIES AND INFRASTRUCTURE | *1* | *4* | *5* |
| B: Facilities and infrastructure: Improved infrastructure | 1 | 4 | 5 |
| B: GENERAL COMMENTS ON ROLE OF RESERVE | *0* | *1* | *1* |
| B: General comments on role of the reserve: Animals draw tourists | 0 | 1 | 1 |
| B: LEARNING/TRAINING | *6* | *9* | *15* |
| **B: Learning/training: About environmental awareness/education** | 3 | 5 | **8** |
| **B: Learning/training: New skills** | 3 | 4 | **7** |
| B: NO BENEFITS RECEIVED | *0* | *0* | *0* |
| B: PERSONAL ENJOYMENT OF RESERVE | *2* | *0* | *2* |
| B: Personal enjoyment of reserve: Relaxing | 2 | 0 | 2 |
| B: SAVING MONEY | *0* | *0* | *0* |
| B: TANGIBLE BENEFITS FOR COMMUNITY STRUCTURES | *15* | *25* | *40* |
| B: Tangible benefits for community structures: Benefits for sport | 0 | 1 | 1 |
| B: Tangible benefits for community structures: Recipient of land claim | 0 | 5 | 5 |
| **B: Tangible benefits for community structures: Sponsorships for community facilities** | 1 | 11 | **12** |
| **B: Tangible benefits for community structures: Support for schools and higher education** | 14 | 8 | **22** |
| B: VISITING RESERVE | *2* | *0* | *2* |
| B: Visiting reserve: Seeing animals | 2 | 0 | 2 |
| **TOTALS** | **35** | **51** | **86** |

tourism/tourists') have been added to the table within the grey bars (italicised and centred). Where a code was not used in the particular case study, it was not included in the table. However, the code group headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which benefits are relevant and which are not relevant to each individual case study, and to aid later cross-case analysis.

***B. Specifics: Benefits due to having protected area near your home***

In response to this question, C1 produced 35 notes on benefits received (i.e. 35 quotes), while C2 produced 51 quotes in the individual interviews. The code groups with the highest number of quotes were 'Tangible benefits for community structures' (40), 'Learning/training' (15) and 'Employment' (14). By a clear margin, both constituencies had the most to say regarding 'Tangible benefits for community structures' (C1:15; C2:25).

Twenty-two out of the 86 responses to this question referred to '**Tangible benefits for community structures: Support for schools and higher education**' (C1:14; C2:8). This is a benefit clearly seen and appreciated by C1. Infrastructure related to schools was coded here while infrastructure related to clinics, orphanages and other community facilities was coded under 'Tangible benefits for community structures: Sponsorships for community facilities'. Hence from Table 6.18 it appears as if schooling infrastructure is not noted by participants, but it is, and is shown under support for schools and higher education. C1 referred to schools six times, bursaries/financial support four times, education twice and one participant mentioned *"Learner tablets"* (P448). C2 also touched on classrooms, schools and bursaries. Both constituencies mentioned preschools as well, and there was mention that the trusts have their own bursary scheme over and above the one offered by Africa Foundation. Two C2 examples follow:

> *"… the benefits that come out of Phinda would be [that] they … prioritise people. And it's clear. Our policy says we work with communities that had been living in the reserve, or we are using their land, or who are nearby, [i.e.] those communities where, … if the lion crosses the fence, will be first affected. … the benefits specifically around education – they've got schools, … some of the schools we didn't build from scratch because when we build a school, it is, of course, identified by them, and we come and help them in achieving that goal … we've built over 150 classrooms … in these communities … adjacent to Phinda"* (P350, 174:174).

> *"… there's the bursary scheme … I mean, even the trusts themselves have their own bursary scheme"* (P357, 132:132).

'**Benefit from jobs**' had the next highest cumulative total of 14 (C1:9; C2:5). The C1 responses were short, all mentioning jobs as a benefit. All five C2 interviewees spoke about this, with three elaborating on the 'knock-on effect' of employment on the wider family, for example:

> *"I would say, … being employed is … priority number one, because, … it doesn't matter if this land belongs to people if they not benefiting anything. Because when you talk about the lease, that is something that is not a [monthly] salary, but [employees] are getting a monthly salary … there are lots of people that are then getting benefits. Because if I was looking after 10 people, those 10 people*

*are getting benefits because I can buy food, … uniforms for their kids. Employment, for me, is number one, especially knowing the rate of unemployment in our country. … It's very high, … it's mainly [communities] like Makhasa, Mnqobokasi and the other communities in rural areas that are suffering more"* (P352, 102:104).

*"… the first one would be job opportunities … in African culture or Zulu culture, if one person is employed, that person is feeding another 10 people which means with 350 people working inside here, we have roughly 3,000 people that are [supported], … To me, that is … key …"* (P355, 100:100).

'**Tangible benefits for community structures: Sponsorships for community facilities**' was coded 12 times (C1:1; C2:11). It is interesting that C1 provided only one note here: "*Programs for orphans*" (P443). On the other hand, five of the C2 quotes mentioned clinics, with the rest being references to HIV/Aids awareness campaigns, OVC centres, craft markets, a poultry project, sports facilities and assisting with vegetable gardens to sell produce to the lodges. One example follows: *"We have built three OVC centres, Orphan and Vulnerable Children Centres. … they are not orphanages, but the kids that are living without parents can get help there, even after school they get to be assisted in terms of doing their homework and [getting] uniform once or twice a year through the donations … coming through different people. … That [is] being run by the people who … started that OVC centre"* (P350, 176:176). The list of projects provided above applies mainly to Makhasa. Those relevant to Mnqobokazi are the OVC programme run at Nkomo Primary School, the vegetable gardens at Mnqobokazi Primary School, and sports equipment that was provided in partnership with Dreamfields[37] [38]. The fact that some of these projects in the list above relate to Makhasa only, could be the reason why C1 did not mention them (only contributing one note here). However, there are still several tangible benefits for community structures that are relevant to Mnqobokazi. This could suggest that C2 need to remind C1 that these initiatives exist and are benefits.

The next two codes used the most relate to **learning/training about environmental awareness/ education** (8) and **new skills** (7) respectively. Under the former (C1:3; C2:5), C1 mentioned "*Eco-club*" (P444), "*Awareness campaigns e.g. rhino poaching*" (P446) and "*Knowledge about environment*" (P447); while C2 spoke about the EEP for schools, the workshops run (for example, on poisons) and the initiative whereby elders and trust members are taken into the reserve for game drives and the rhino dehorning. One example is *"We've got the conservation lessons that we are doing [with] kids. They might not be benefiting money and stuff but knowledge-wise. It's so sad when you ask a child if he has ever seen a lion or a rhino and he says he has never seen one, [but] a child from overseas has seen an elephant more than 10 times, and the one who is … next door has not seen it. It's sad. By them coming in and seeing it, to me, it's one of the benefits here …"* (P355, 100:100). For new skills training (C1:3; C2:4), C1 noted the exchange programme and skills training. Three C2 comments related to the 'Star in Training' skills programme, while another referred in general to the large pool of skills created by Phinda, for example:

37. Personal communication with Mr Isaac Tembe (Africa Head, Methodology and M & E, Africa Foundation) via skype on 2 August 2019.
38. Dreamfields is a non-profit company with aims to equip South African townships and rural schools with soccer kits (Dreamfields, 2019).

*"Phinda has actually created a very big pool of skills that has benefited not only the community, but the surrounding lodges and the tourism establishments"* (P354, 75:75).

*"We've got a number of skills development programs that we've started [that] I think are working very well, and obviously it doesn't reach the whole community ... The Star in Training programme takes school leavers mainly – 14 every year, seven from each community, and they come and do an internship … for six months, and then generally most of them find permanent positions – because there's obviously turnover and you will then pull in one of them. … because in our lease we have preferential employment with these two communities"* (P357, 128:132).

As evident in this chapter, the **successful land claim** is a major benefit. However, all mentions under this question came from C2. This is also the case in the other questions, apart from one mention by C1 under 'Q1 Knowledge' where it was stated that after the land claims, things improved; and one mention under 'Q3-2 Positive changes', where a beneficiary of the trust said she relies on Phinda for her livelihood. This is a potential gap which C2 need to emphasise in their communication – that the rentals paid do not only benefit the trust beneficiaries, but spill over into the wider community. In this question, the C2 participants mentioned the rental payments that are paid annually to the two trusts (Makhasa Community Trust and the Qhubekani Mnqobokazi Community Trust respectively), and the way this money contributes to the greater community (The community trusts have used this money to provide additional spin-offs such as electrification of Mnqobokazi, building a community hall and having their own bursary scheme).

**Improved infrastructure in general** (not related to schools, healthcare, etc.) was mentioned five times (C1:1; C2:4). C2 made reference to boreholes, roads and the water pipeline, while the single C1 note said "*Water projects*" (P445). As also seen under, 'Tangible benefits for community structures: Sponsorships for community facilities', C2 seem more aware of these projects than C1.

Other benefits that emerged were **benefits from tourism/tourists**, namely inter-cultural contact, donations from tourists and recognition that tourism benefits the community. However, all seven of these were from C2. The **inter-cultural contact** stems from the visits that tourists make to the communities. Four quotes related to this, with one example following: *"I think that the benefit for living next to the game reserve, first of all, has actually been exposure. Exposure to the outside world is much improved. By that I mean they get quite a lot of guests coming, they interact with guests quite a lot"* (P354, 119:119)". Out of these community trips, **donations from tourists** often result. The following two quotes explain well how all staff at Phinda are exposed to the community projects, so that they can converse with guests about these. If guests are interested, they can visit the community:

*"[Tourists] don't pay for the community trip … because the community trips are mainly a fundraising strategy. [When] trainee rangers … get employed, it is a culture of &Beyond that every ranger and the staff need to know about the community work that we're doing. … Every new staff [member goes on] a community trip … just to see one or two projects … so that when they meet the guests, they can … talk about the story. … So it's four or five hours with [the trainees], stopping at one project. I would give a background, how it started, what challenges were there … we went to a school and then we*

*went to a crèche, we went to a clinic, we went to a craft market and that actually gives an understanding of what we do and how we do it*" (P350, 261:269).

"*Last month … we took a potential donor to Mnqobokasi. She has now confirmed that she's going to donate money for the bathrooms, for the kids … [she was] a tourist. … because Phinda has been here for almost 26 years now, we get lots of repeat people … We have managed to get some funds because somebody had spoken to somebody else about Phinda, about the projects. That's why, when we take our guests to [visit] the community, we sponsor the vehicle, cool drinks, all the refreshments, no pay. … Some people come with stuff to give to the schools, like pencils, crayons all that. I have seen lots of that happening. … but they obviously know [about the community] because, on our guest feedback survey there's a line that talks about the Phinda relationship in the communities, … so as a ranger you don't want guests to write that [they were] not informed. … I've had groups going out playing football, playing with the kids, going to paint preschools, schools. They do that a lot*" (P352, 112:126).

From C2's comments in this question, and under 'Q3-2 Positive changes' and 'Q4-3 More positive', it is evident that through tourism and tourists, there has been upliftment in the communities. The void is that C1 are not mentioning it, apart from in 'Q1 Knowledge', where a participant stated that tourists visit communities and work through Africa Foundation to support them; and under 'Q2-1 Relationship', where it was mentioned that through tourists visiting a school, a relationship developed and that tourists contributed to the economy. This appears therefore to be a gap that could be highlighted more by C2 in their communication – that through tourism, reserve revenue is boosted and through tourists that visit the community, there have been a number of positive spin-offs over the years. Without tourism, there will be no revenue and no spin-offs.

As a separate tourism product to the visits to the community, under the code '**Tourism benefits us**', a C2 participant mentioned a Zulu village tour that tourists can go on, where tourists get to learn about Zulu culture, and the proceeds go to the community. However, this initiative is predominantly in Makhasa.

With regard to visiting the reserve to **see animals** and to **relax,** there were two mentions under each of these and all were from C1, for example, "*Leisure*" (P451)", "*Game drives*" (P453) and "*Wildlife exposure*" (P469). Taking into consideration the answers under 'Q6 Experience', several of the community have been into Phinda for various reasons, but few as tourists, and none of the participants had entered independently with their families. In 'Q3-2 Negative changes', a C1 member voiced a request for discounted options to make the reserve more accessible to them. In 'Q4-3 More positive', two participants expressed the desire that community members could access and experience the reserve. Considered cumulatively, it appears that this is a needed growth area in the relationship between the community and the reserve.

### *C. Summary: Benefits due to having protected area near your home*

There is agreement between C1 and C2 that there are clear benefits in terms of support for schools and higher education, employment, and learning and training in skills and environmental education. These are also the top four as per the community's original categories (but slightly reworded). After coding, the top benefits emerging for C2 were sponsorships for the community, support for schools and higher education, employment, learning and training on the environment and the successful land claim.

When seeking key similarities between how C1 and C2 rank benefits, the commonalities are a focus on education and employment. Two C2 participants do rank the school EEP and SMME development, which aligns with C1's recognition of skills and programmes as an important benefit category. However, the other C2 participants rank healthcare, rental income and exposure to the outside world as what they think would be the top benefits for C1. This dichotomy could provide food for thought, with C2 perhaps needing to communicate more on why the benefits they (C2) ranked are seen as key to them; but also to take cognisance of what C1 have earmarked as the most important benefits. Should those that C1 ranked at the top be emphasised more in communication? For example, reminding community members that the trust itself has a bursary scheme, and highlighting the skills programmes that C1 did not mention.

It is not an ideal result that C2 mentioned more benefits than C1 (C1:35; C2:51). C1's top counts were for schools and higher education benefits, and jobs. For C2, it was for sponsorships for community facilities, and schools and higher education. Results indicate that they concur on the importance of these two as well as on learning and training – in environmental education and skills. However, C2 highlight a few other benefits that are not mentioned or barely mentioned by C1: sponsorships for community facilities, benefits from tourism/tourists and the successful land claim. While the sterling effort of C2 to communicate, interact with and involve C1 is acknowledged, it would appear from these results that communication from C2 could be improved in these areas:

- Sponsorships for community facilities – C2 could remind C1 that these initiatives/facilities exist because of Phinda, and are benefits.
- Land claim and rentals – this emerged in other questions, and C2 could emphasise to C1 that the rentals paid do not only benefit certain individuals, but spill over into the wider community.
- Benefits from tourism/tourists – this too emerged in other questions, and C2 could highlight that through tourism, reserve revenue is boosted; without tourism there will be no revenue; and that tourists visiting the community result in various positive spin-offs.

Finally, it appears that very few community members get to enjoy the reserve as tourists, and this could be a positive growth area in the C1/C2 relationship in future.

C1 and C2 focus more on tangible benefits. C1 do mention the intangibles of environmental education/awareness, experiencing animals and enjoying the reserve; while C2 do mention those of inter-cultural contact and environmental education/awareness. It could be that a future focus on intangibles such as enjoyment/learning about environment and inter-cultural contact is a realistic and achievable strategy for C2.

As mentioned in the MNR/K case, considering which benefits matter most, from the different perspectives of the two constituencies, does add richness. While C1 will mention what has touched their lives or those around them, C2 have witnessed individuals benefiting from rental income, inter-cultural contact, sponsorships for community facilities, and so forth. The participants in the C1 focus groups may not have interacted with these individuals who have benefited in these ways. Hence, it is important to consider the benefits mentioned by both constituencies, and for stakeholders to continue to stress these benefits, and to raise awareness of what Phinda is doing to improve the lives of the community.

Section 6.3.7, together with Section 6.3.3, contributes towards answering Research Objective 4.

### 6.3.8 Losses due to having protected area near your home

Table 6.19: Orientation to Question 9-7: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q9-7 / L=Losses | Y | | What are the losses (costs/negatives) of having this nature reserve near to your home? Which of those losses impact the most on you? Which ones impact the least? | NGT |
| | | Y | What are the losses (costs/negatives) to the local community due to living near this nature reserve? Which of those losses/costs do you think impact the most on them? Which ones impact the least? | II |
| **Research Objective** | | | 4 | |

***A. Overview: Losses due to having protected area near your home***

This question captures participants' perception of losses. Strictly speaking, sometimes these may not be actual losses. However, participants' perception of losses must be investigated as it captures what **they think are losses**. This information is important for management to know, so that it can be addressed.

The loss categories determined by the researcher while developing the coding system for this question included those defined by the community, but were coded to a finer level of detail. In terms of category place (or ranking as voted for by C1 using their own categories), the top loss was clearly 'Trouble for livestock', followed by 'Job security' and 'Visit limitations'. C2 did not rank loss categories. Moving away from the ranking to counting quotes (using the researcher's coding system/categories), C1 mention slightly more losses than C2 (C1:19; C2:14), with C1 highlighting eight types of losses, and C2 six. In this case study, the constituencies mainly focus on different losses. For C1 'Fear of wild animals' received the

most mention, while for C2 it is equally loss of land and that medicinal plants cannot be accessed. However, the content of the quotes must be examined before any meaningful conclusions can be drawn.

As was done for Section 6.3.7 on 'Benefits', the discussion is divided into loss category, loss category place and the specific losses (Sections 6.3.8.1 to 6.3.8.3 respectively).

### *6.3.8.1 Loss category*

As explained for the preceding question on benefits, the C1 participants grouped the losses (written on notes) into categories and then named those categories. These original categories were captured within Atlas.ti with their own code set, using the prefix 'L Cat', for example 'L Cat: Trouble for livestock'. C2 were not asked about categories, since they were not producing notes which needed to be grouped. They were only asked to name the losses which they thought impact the community. This data was explored via network views in Atlas.ti. Figure 6.7 displays the loss categories identified by the community and ordered according to number of notes generated. This placing is indicated by the blue numbers. Figure 6.8 depicts the loss categories developed by the researcher during coding.

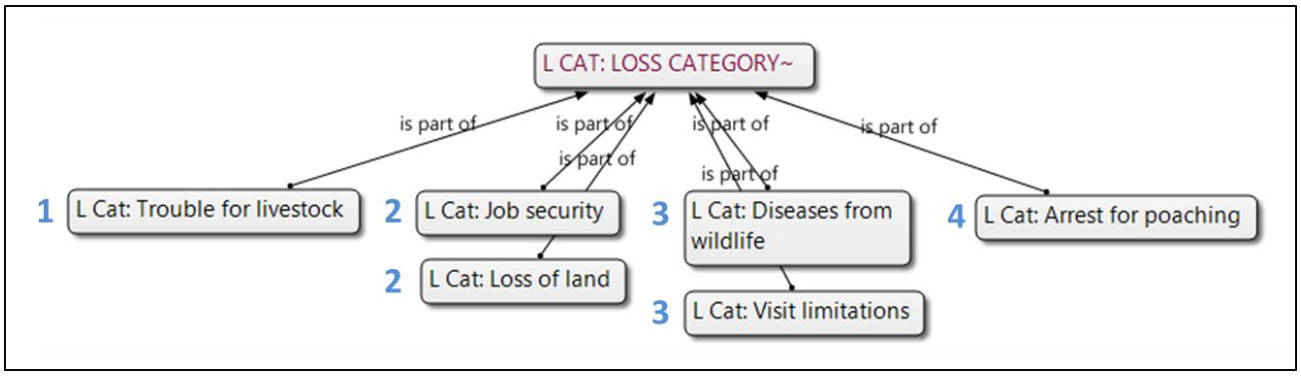



Figure 6.7: PGR/M loss categories as determined by C1 participants according to number of notes

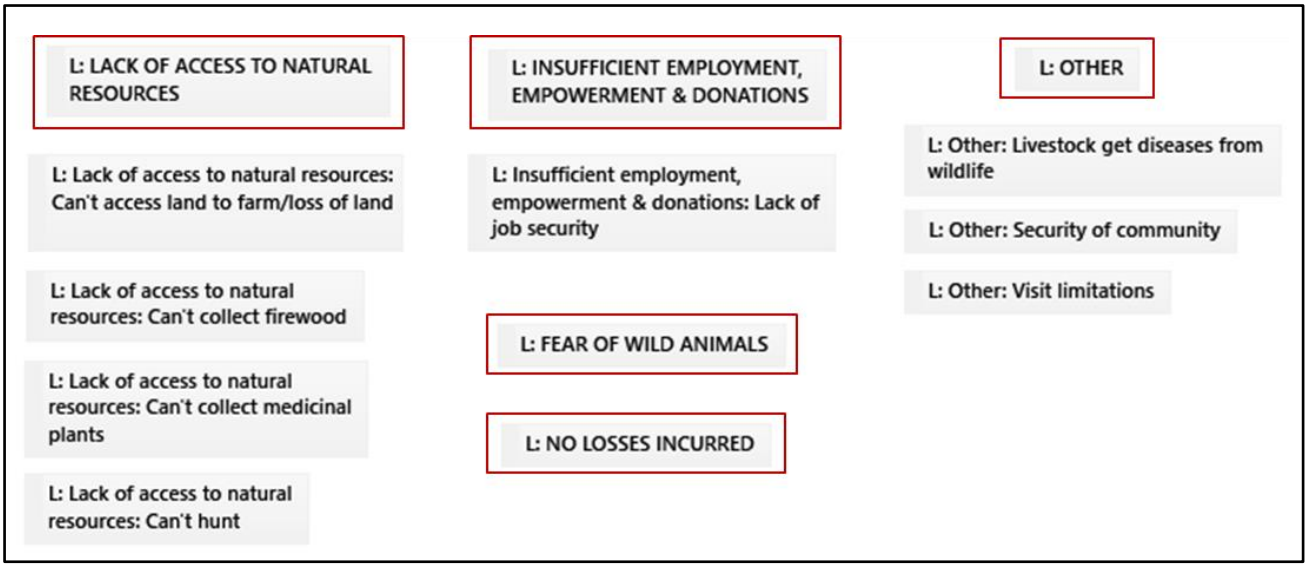



Figure 6.8: PGR/M loss categories as determined by researcher during coding

All the categories named by C1 still exist within the researcher's categories, but with a different structure, for example, quotes under 'Trouble for livestock' were integrated under 'Fear of wild animals' since three related to the fear that livestock would be harmed, and four to general mention of dangerous animals. However, the fact that C1 grouped all these notes under 'Trouble for livestock' would indicate that even the notes that only mention dangerous animals (and not livestock) have been mentioned because the people fear for their livestock.

#### *6.3.8.2 Loss category place*

After participants had determined categories, the notes in each category were counted, providing an importance weighting to each category, as indicated by the blue numbers in Figure 6.7. For example, 'Trouble for livestock', which had seven notes, was placed first, above 'Loss of land' and 'Job security' which both had three notes. Once again, the researcher asked the group if they agreed with the order of importance of the loss categories. The results of voting are shown in Table 6.20. For C1 participants, the top four loss categories as per group voting were 'Trouble for livestock' (7 notes), 'Job security' (8), 'Visit limitations' (2) and 'Arrest for poaching' (1). Comparing the voting results with the blue numbers (using number of notes) in Figure 6.7, the placings are maintained except that 'Loss of land' fell away and was not voted on (refer to the note under Table 6.20), and 'Diseases from wildlife' fell from third place to fifth place.

Table 6.20: PGR/M loss category placings: C1

| CATEGORY PLACE (According to C1 vote) | C1 NGT | |
|---|---|---|
| **1** | Trouble for livestock | (7) |
| **2** | Job security | (3) |
| **3** | Visit limitations | (2) |
| **4** | Arrest for poaching | (1) |
| **5** | Diseases from wildlife | (2) |

* Number in brackets is the number of notes produced by C1 participants. While 19 notes were produced in total, the discrepancy here (total 15) is due to these:

- While loss of land had three notes, when voting, C1 chose not to include it as they said it was a problem a long time ago. However, three of the group did not agree.
- The group chose not to include and vote on the single note, stating 'Killing of people by security'.

#### *6.3.8.3 Specific losses*

The reader may want to refer back to Figure 6.8 which indicates the hierarchy of losses which emerged as coding occurred. Table 6.21 shows the frequency of codes for C1 and C2 respectively. A totals column was included here to provide a sense of the most significant losses overall, i.e. from **both C1 and C2**. The top four losses have titles and totals in bold. The main loss categories overall are also totalled to contribute to the wider picture (totals are centred and italicised with rows shaded in grey). Where a code was not used in the particular case study, it was not included in the table. However, the code group

headings (indicated by the grey bars) remain, even if the total for this group was zero. This is done to ascertain which losses are relevant and which are not relevant to each particular case study, and to aid cross-case analysis.

Table 6.21: Code frequencies for 'Q9-7 Losses': PGR/M

| CODE FREQUENCY (L=Losses) | C1 NOMINAL GROUPING TECHNIQUE | C2 INDIVIDUAL INTERVIEWS | TOTALS |
|---|---|---|---|
| **L: FEAR OF WILD ANIMALS** | *7* | *1* | ***8*** |
| L: INSUFFICIENT EMPLOYMENT, EMPOWERMENT AND DONATIONS | *3* | *1* | *4* |
| **L: Insufficient employment, empowerment and donations: Lack of job security** | 3 | 1 | **4** |
| L: LACK OF ACCESS TO NATURAL RESOURCES | *4* | *10* | *14* |
| **L: Lack of access to natural resources: Can't access land to farm/loss of land** | 3 | 4 | **7** |
| L: Lack of access to natural resources: Can't collect firewood | 0 | 1 | 1 |
| **L: Lack of access to natural resources: Can't collect medicinal plants** | 0 | 4 | **4** |
| L: Lack of access to natural resources: Can't hunt | 1 | 1 | 2 |
| L: LACK OF INFORMATION/CONTACT | *0* | *0* | *0* |
| L: NO LOSSES INCURRED | *0* | *2* | *2* |
| L: OTHER | *5* | *0* | *5* |
| L: Other: Livestock get diseases from wildlife | 2 | 0 | 2 |
| L: Other: Security of community | 1 | 0 | 1 |
| L: Other: Visit limitations | 2 | 0 | 2 |
| **TOTALS** | **19** | **14** | **33** |

### *B. Specifics: Losses due to having protected area near your home*

While **lack of access to natural resources** has barely emerged from C1 in this case study, it is the strongest category here, but only due to C2 mentioning it more than other losses (C1:4; C2:10). Considering the entire chapter, lack of access to resources emerges under 'Q3-2 Negative changes', but again only by C2, and in the context of it being a problem in the past, and reflecting on whether it can truly be considered a negative (since things are better now for the community). In 'Q5 Others' Views', there are two requests from C1 for medicinal plants and bush meat respectively. Nobody talks about it as a benefit, which implies that it has not been allowed or utilised for a long time. In terms of losses, there are seven under 'Can't access land to farm/loss of land' (C1:3; C2:4), but the context and content of the quotes are more important than the numbers. C1 mention loss of land and loss of grazing, for example, "*Limited grazing for cattle*" (P486) but, when voting, the majority of the group (nine out of 12) expressed that this is no longer a problem as they feel they benefit more now that the land is leased to Phinda than they did before. C2's comments on land relate more to it being a historical problem, for example: *" … the way I look at it, I don't see a loss because, … they're getting employment, they're getting … benefits. To me the loss is very minimal, if [at all]. Like I said, they used to complain about the grazing*

*field … Maybe I am biased because I work in the park and I just see the benefit only*" (P355, 120:120). The only other C1 note relates to the code 'Can't hunt', where the participant, referring to subsistence poaching, wrote "*Arresting people for poaching*" (P477). The C2 quote confirms the perception that some people feel deprived of the chance to hunt to feed their family (P350, 78:78). C2 make four references to medicinal plants. To summarise C2's input with respect to medicinal plants – it is not encouraged, but they occasionally get requests and then it is a formal controlled process. One quote follows as an example:

> "*Yes, of course they're jumping around that, and I remember at some point it was agreed that whenever they need some medicinal trees that are in the reserve, they will be allowed … at a particular time. So, they don't overuse it … for us it's to say 'okay let's leave [the plants] until they are up to this level, then you can come and get it but [only] so much … so that it can grow'. … There is an arrangement also – they ask the induna, and [he] will write a letter to us and then stamp it so that we know that it's official. … they will tell the induna 'we want to go there', they will mention the place so [reserve management] will check [first]. Then they will be … met at the gate, escorted to do that … If we get those requests we do tend to them depending on if what they are asking is available in a good enough quantity and they're not going to destroy it completely"* (P350, 245:253).

Regarding natural resources, based on the data from all the questions, one can conclude that, for the participants in this study, resource access is barely an issue for C1. C2 dwell on it far more, but more as a reflection of what has been lost and gained in return, and that it used to be an issue, but there are very few requests now.

**Fear of wild animals** is a loss clearly identified by C1 (C1:7; C2:1). Four notes relate to dangerous animals [e.g "*Dangerous animals escaping*" (P490) and "*Big Five crossing the fence*" (P492)], while three are about livestock being in danger [for example, "*Livestock killed by dangerous animals when they escape*" (P491) and "*Cattle in danger*" (P488)]. Originally C1 grouped all seven of these notes under 'Trouble for livestock'. This suggests that their fear is more for their livestock than a fear of people being harmed. The C2 participant states *"So, negatively affected would probably also be the threat that comes with dangerous wild animals that are within the game reserve. That would negatively affect them"* (P354, 85:85).

Other than for 'Fear of wild animals' and the entire category of 'Lack of access to natural resources', quote frequencies for other losses are all low. '**Lack of job security**' emerges as a loss worth noting (C1:3; C2:1). C1 mention "*Firing of employees*" (P481), "*Poor policy in terms of job security*" (P482), and "*Employment imbalance*" (P494). The latter is echoed by C2: "*Losses in terms of opportunities to play a role at a much higher level in terms of management*" (P354, 123:123). Both job security and lack of community people holding senior positions have already emerged in other questions within this case study, and hence bear noting by C2. Could there be more clarity in terms of dismissal procedures, and additional mentorship and/or training to place locals in management positions?

Under 'Other', there are five quotes in total, all from C1. They relate to '**Livestock get diseases from wildlife**' (2) ["*Diseases associated with wild animals which spread to our livestock*" (P478) and "*Diseases from escaped animals*" (P478)] and comments on **barriers to community members visiting PGR** (2) [*"Charge during park visit"* (P483) and *"Limitations to visit game reserve"* (P484)]. Both of these have already emerged under other questions. It may be worth equipping C1 with knowledge regarding these diseases (for example, via workshops). Measures to make the reserve more accessible to C1 have been suggested in Sections 6.3.3.3 and 6.3.4. Finally, a note on extremely **harsh security measures** was also present (1), but the group chose to exclude it from voting, which could imply it is only the opinion of a single individual. It also emerged under 'Q3-2 Negative changes'.

Lastly, under '**No losses incurred**', the two C2 quotes are worth mentioning as they point again to the overall success of this model:

> *"… For me I wouldn't think of any loss, rather the gains. … There are more gains. In fact, I don't even have [one], even if I try to think. Because for them, it's not that they lost the land because … what would you use this land for, and how would you benefit compared to how you are benefiting now?"* (P350, 235:235).

> "*There might well be some negativities … you'll never hear everyone commenting about it, but in most cases I have never heard someone saying anything negative about Phinda or about the reserve*" (P352, 52:52).

***C. Summary: Losses due to having protected area near your home***

Following coding, the main losses for C1 were fear of wild animals, lack of job security, lack of access to the land/can't farm, livestock getting diseases from wildlife and visit limitations. For C2, lack of access to medicinal plants emerged. They also acknowledged loss of land/can't farm but added that more benefits flow now that Phinda leases this land. Some participants referred to no losses being incurred.

For C1, fear of wild animals harming their livestock is the main loss identified. Fear of animals harming people emerged in the question on 'Relationship', and fear for people, livestock and property under 'Negative changes'. Hence this fearful perception needs to be taken cognisance of. In follow-up sessions after the data had been analysed, it was confirmed that the only case of major property damage seems to be the house destroyed by elephants almost 25 years ago[39]. Most human-wildlife conflict is caused by leopards and spotted hyena because they move freely through the reserves and do not belong to specific reserves. Hence compensation is not paid in these cases. There have been no issues with lion or cheetah during the time of the current reserve manager (approximately 13 years). In these cases, PGR would take responsibility and award compensation. At present, there are no statistics on incidents related to human-wildlife conflict.[40]

39. Personal communication with Mr Bheki Ntuli (Regional Manager, Africa Foundation) via email on 28 August 2019 and with Mr Isaac Tembe (Africa Head, Methodology and M & E, Africa Foundation) via skype on 2 August 2019.
40. Personal communication with Mr Simon Naylor (Reserve Manager, Phinda) via email on 30 August 2019.

There is no clear solution to this challenge, apart from explaining the system to communities, ensuring that people know who to contact in an emergency, and reminding them that property damage has not occurred for many years, and hence could be an unfounded fear. It could be worthwhile to keep a record of these incidents, as, if they occur seldom, this could be shared with communities and help to alleviate fears.

At this point in the study, it can be concluded that access to natural resources is barely an issue for C1. C2 do acknowledge loss of access to medicinal plants as a loss. While it is not encouraged, it appears that requests are facilitated under certain strict conditions. Two other losses emerged that have been reinforced in other questions, namely poor policy in terms of job security (from C1), and lack of opportunity for locals in management positions (from C1 and C2). C2 assert that there are no losses in their eyes – only gains, and that people do not speak negatively about Phinda.

As was witnessed for 'Q3-2 Positive Changes' and 'Q3-2 Negative Changes' (where more positive changes were mentioned than negative changes), for 'Q8-6 Benefits' and 'Q9-7 Losses', in total, more benefits are mentioned (C1:35, C2:51) than losses (C1:19; C2:14). C1 expressed 14 more positive changes than negative changes, and 16 more benefits than losses.

Section 6.3.8, as well as Sections 6.3.7 and 6.3.3, contributes towards answering Research Objective 4.

### 6.3.9 Dreams for an ideal future

Table 6.22: Orientation to Question 14-10: PGR/M

| Question ID / Code prefix | To C1 | To C2 | | Method |
|---|---|---|---|---|
| Q10-8 / D=Dream | Y | | For you, living near this nature reserve, what is your ideal future for your community? What is your dream situation? | FGI |
| | | Y | For this local community, living near this nature reserve, do you have any ideas on what could be an ideal future for them? | II |
| **Research Objective** | | | 6 | |

#### *A. Overview: Dreams for an ideal future*

Table 6.23 outlines the results for this question. 'More development and employment' received the most quotes (C1:2; C2:4), while other codes elicited one, two or three quotes. 'Community projects and financial aid' and 'Skills development' had three quotes each. The top three codes all had quotes from both C1 and C2, while the other codes were only used for C2, apart from 'Interaction with reserve' (C1:1; C2:2). C2 are considerably more active in this question (C1:5; C2:14). In this case study, C2 provided the large majority (14) of the dreams.

Table 6.23: Code frequencies for 'Q14-10 Dream': PGR/M

| CODE (D=Dream) | C1 | C2 | TOTALS |
|---|---|---|---|
| D: More development and employment | 2 | 4 | 6 |
| D: Community projects and financial aid | 1 | 2 | 3 |
| D: Skills development | 1 | 2 | 3 |
| D: General education to uplift community | 0 | 2 | 2 |
| D: Conservation/tourism ethos spread into local community | 0 | 2 | 2 |
| D: Interaction with reserve | 1 | 1 | 2 |
| D: Facilitate entrepreneurship | 0 | 1 | 1 |
| D: Change local community boundaries | 0 | 0 | 0 |
| D: Environmental education | 0 | 0 | 0 |
| **TOTALS** | **5** | **14** | **19** |

### *B. Specifics: Dreams for an ideal future*

For this final question, the data are displayed differently. In order to reflect all the dreams expressed by participants, their quotes are organised in table format under the relevant code (Table 6.24). The reference within Atlas.ti and the constituency (C1 or C2) from which the quote originated, are also indicated in the table. A brief analysis takes place in the summary of Section 6.3.9.

Table 6.24: Dreams of C1 and C2 for an ideal future: PGR/M

| 1 MORE DEVELOPMENT AND EMPLOYMENT | REF. | |
|---|---|---|
| *"I dream that one day maybe the game reserve should help us in terms of reducing unemployment, giving young children more job opportunities so that they can prevent themselves going to do something that is not necessary, like crime …".* | P351, 21:21 | C1 |
| *"He would like to see more training for people in nature conservation [who] then get employed for that. And then … he would like … Africa Foundation … not to be biased towards certain areas that are adjacent to them, but also equally provide opportunities for this area so that we get benefit from them, because they belong to us".* | P351, 32:32 | C1 |
| *"I think there's still a lot of areas of community land that could be incorporated into a [protected] area like this … that could create jobs and obviously conserve the last remaining natural land. I think the challenge is the growing population and I don't know how you address that. And meeting the needs of that growing population. In fact, that's a whole different topic that's got to be addressed. … but I think there's still areas that could be incorporated and, … making this model grow, and then obviously benefiting communities".* | P357, 179:181 | C2 |
| *"Well for me, it would be a situation where first of all, you have … the management of the game reserve … run by the people … But also credible people … And I'm not talking about lowering the standard, I'm talking about people educated enough to … understand how to run those kind of issues. And you have a situation where Phinda continues to lead in terms of reduced numbers of poaching, where the community are less dependent on natural resources – in other words, their livelihood does not need anybody to go poaching because they've got a wide variety of alternative livelihood support and opportunities".* | P354, 157:157 | C2 |
| *"… going back to water. Having running water into each and everyone's house".* | P352, 154:154 | C2 |
| *"… infrastructure and all that comes second".*<br>* Participant put skills development first. | P350, 297:297 | C2 |

| | | |
|---|---|---|
| **2 COMMUNITY PROJECTS AND FINANCIAL AID** | | |
| *"For the benefit of both the community as well as nature conservation, they should from their side bring closer all the facilities and programs that are dealing with [the] recycling project so that the community could have an opportunity not to go far in terms of bringing their recycling material, rather to be able to source it from here and then submit it nearby".* | P351, 30:30 | C1 |
| *"… there's not much drugs here compared to the big cities, but it's creeping in. It would be nice to see no child doing drugs or smoking dagga or doing all this stuff. … That's why we have … sports here, inside and outside, organise some games so that at least we keep kids busy during school holidays or whenever … I know it's impossible, but if we can get everyone doing something [rather] than not doing anything".* | P355, 144:144 | C2 |
| *"I think there's a lot of potential for the communities to farm with wildlife. They have still quite a bit of land available and … game farming … would allow for the production of … venison, game meat. I think that has a lot of potential that could meet the needs of [people], supplying good healthy meat at a good price".* | P357, 179:179 | C2 |
| **3 SKILLS DEVELOPMENT** | | |
| *"She says that she would like to see the relationship going forward and a long lasting healthy relationship between the communities and the game reserve, … in such a way that they bring about some sort of … sustainable development, like providing skills centres which will give opportunities, particularly for students who are not academically able, [to gain] skills, so that they can develop themselves and open up for job opportunities".* | P351, 19:19 | C1 |
| *"Firstly, skills development. … I know that young people when they finish matric, they think about university, that's not everyone. … you need plumbers, you need people … to do electricity. You know we've got a housing project of 1,700 houses … how many plumbers are from the community? How many bricklayers …? Building industry is going to always be there and people are going to fix that, … drill the boreholes, … it's skills development. Once we have people, … especially young people or maybe 70% of the young people, because those people are going to start businesses, … and these lodges … need those services, they need people who can fix a refrigerator, air conditioning … So, for me that is skills development. … I'm chairing … a community board that was started by … one of these communities that we work with. … We got funding from the services SITA to build a skill centre in a very rural community. Do you know what that skill centre will do? … there was no road there, there's already a plan now for that tarred road. Electricity is already being installed as I'm speaking and there's going to be a plan to get water to the community and it's going to create more … business opportunities for the taxi owners locally … So it's a lot, it's a lot! … Then secondly, those people … they create more jobs, they can … build beautiful houses because that will be improving the life of those people and families, and they can send their children to even better schools, out of that self-sustainable kind of economic development. … My ideal picture would be to see those communities not being dependent from the outside, being self-sustainable …".* | P340, 358:358 | C2 |
| *"You increase the number of businesses in the area, you increase the number of skilled personnel. In other words, a pool of skills, so that every opportunity that comes into those communities can actually be handled by the communities themselves without people coming from outside. For me, that would really be an ideal situation. … And have, of course, the trust actually operating at a maximum level, where all social development programmes are handled and they have the capacity and the trained secretariat to run the trust effectively and efficiently, with funds accounted for. That, to me, would be an ideal situation".* | P354, 157:157 | |
| **4 GENERAL EDUCATION TO UPLIFT COMMUNITY** | | |
| *"Better education. Well-equipped schools. Well-qualified teachers".* | P352, 154:154 | C2 |
| *"Where the rate of education in the community is such that … no student [does not succeed] – you increase the number of graduates in the community".* | P354, 157:157 | C2 |

| | | |
|---|---|---|
| **5 CONSERVATION/TOURISM ETHOS SPREAD INTO LOCAL COMMUNITY** | | |
| *"… from the side of the business, like conservation, … the picture that I … envisage is that the conservation authorities … don't feel like it's a demand for them to actually do something for the communities, for them to buy into what they are doing. … When the communities are well-informed about the benefits and the importance of conservation, that's when I see both sides not having any pressure … because sometimes you do things and you get into the communities, you try and work [it] out because you're trying to change these people's mentality …".* | P350, 309:309 | C2 |
| *"The important one, for me, it's looking after our wildlife, … which is, I call it my gold, this is our mine where we dig our gold … we can look after it and it's one of those resources that cannot perish if we take good care of it. And I always laugh when people ask me if I go to church. … unfortunately, I can't go to church, but I do praise God and the way I praise God is I look after what he created. I am here every Sunday to make sure that what God created is looked after for the next generation and the next generation to still find it. … I'm here and I'm happy".* | P355, 144:144 | C2 |
| **6 INTERACTION WITH RESERVE** | | |
| *"I would like the community members themselves to have shares of ownership for the game reserve that would give us authority that we are sitting on the board and [involved] in decision making".* | P351, 28:28 | C1 |
| *"… what we have seen [is that some] of the conservation authorities went incorrectly to try and address [things] because they were feeling [it was] a pain and all that. I have hosted a couple of people or authorities coming to learn our model and some are saying 'no, your model is good but it takes too long'. It's frustrating. … like yesterday, you get there, you get five people, where are the 15 people? You've organised with them, yesterday they agreed, then … you phone them, 'aah I forgot' … [and you think] 'these people are not serious – rather put a fence, get the anti-poaching unit, get the guns and patrol our fences'. That's where the problem is because it's frustrating – it took us years to be where we are, even now it's still a process. So, I think once there's that mutual understanding, there'll be that mutual benefit … I think then I can retire …".* | P350, 311:311 | C2 |
| **7 FACILITATE ENTREPRENEURSHIP** | | |
| *"I would like to see everyone in the community working, even if they don't work for Phinda, even if it means they start their own businesses, like craft markets, they can start whatever they can start so that they can get their hands busy, be able to support and supply their family with food and stuff. That is my biggest wish, to see that no one, no child of Africa is starving or not going to school".* | P355, 144:144 | C2 |

REF=Reference within Atlas.ti.

### *C. Summary: Dreams for an ideal future*

Most of the dreams relate to people and development. In addition, the majority of the dreams are voiced by C2. This highlights again the intentionality of C2 to see communities uplifted and benefiting.

The desire of both constituencies to see more **development and employment** stands out above the rest. C1 focus on more job opportunities, training and equal opportunity employment amongst the bordering communities. C2 spoke more about community land being incorporated which would increase jobs; the reserve being managed by locals; having a wide variety of livelihood options that do not depend on natural resources; having running water; and infrastructure.

Regarding **community projects and financial aid**, the C1 request for a local recycling project touches on a recurring issue as well as a potential solution. Litter in communal areas is a problem in this community and a recycling facility could provide a financial incentive to clean up, as well as create employment. There is currently a recycling facility run in Makhasa, mostly for Phinda waste. A recycling facility at Mnqobokazi that also helps to process waste from the lodges, could be worth investigating, and could result in job creation and a cleaner communal environment. However, there have been attempts by Phinda staff to approach community establishments such as schools and clinics, but this has not been successful[41]. Awareness of recycling exists among locals, but it appears there are challenges in establishing these initiatives. The C2 dreams relate to keeping the youth busy in positive activities such as sport (to avoid drug usage, etc.) and community farming with wildlife to produce venison. The latter holds potential as an income generating project that is not destructive to the environment (unlike cattle farming) and would also require that land is restored to its natural state, which is positive.

Three dreams emerge under **skills development.** A C1 female confirms that they want the relationship with Phinda to continue and to be long-lasting and healthy. Her dream is for a vocational skills centre for young people, so as to cater for those who are not strong academically. This links well with the dreams from C2, which voiced the same desire – skills development for non-academically inclined students, so that locals can handle the needs of the reserve (building, plumbing, electricity, repairs, etc.) rather than sourcing skills from outside the surrounding communities. This is an opportunity for sustainable job creation. In addition, the dream of seeing the trusts operating at maximum level – handling all social development projects and running the trust efficiently – is mentioned. This would be optimal as it means that the community runs its own projects.

In terms of **education**, C2 dream of better education – well-equipped schools, qualified teachers and an increased number of matriculants. **Conservation**-related dreams also emanate from C2 and relate to changing the local mentality so that people understand conservation and the resulting benefits; and the fact that wildlife is the gold to be mined, and hence must be protected. **Interaction with the reserve** also emerged, with C1 suggesting that locals can have shares in the reserve and take part in decision-making. The latter resonates with a theme emerging from C2 in this case study – that of locals being more involved in reserve leadership and management. The second quote here should be considered in conjunction with the 'P350, 309:309' quote in Section 5 of Table 6.24. This C2 participant wishes the conservation side of Phinda to buy into the social development projects more willingly. The participant wants the relationship between conservation, social development and the communities to all be on the same page – for there to be mutual understanding. The second part of this quote (P350, 311:311) deals with the fact that while the Phinda model is a good one, it requires much effort, years to get to where they are today, and frustrations along the way. Finally, the dream under **entrepreneurship** echoes the desire to see small business development and everyone working, so that families can be provided for.

41. Personal communication with Mr Simon Naylor (Reserve Manager, Phinda) via email on 30 August 2019.

While the dreams may appear to be dominated by social development, there are continuous links to the environment within these dreams: conserving more land; continuing to decrease the rate of poaching; less dependency on natural resources; farming with wildlife; a recycling project/depot; helping the community to understand the importance of conservation and the resultant benefits; and seeing wildlife as gold to be carefully mined.

Section 6.3.9, together with Section 6.3.4, contributes towards answering Research Objective 6. Sections 6.3.1 to 6.3.9 contained the results and analysis for each question put to participants. The next section (Section 6.3.10) briefly deals with cross-question analyses.

## 6.3.10 Cross-question analyses

### *6.3.10.1 Comparisons across questions: Benefits, Losses, Positive changes and Negative changes*

The purpose of this comparison is to investigate whether any pattern occurs between benefits and losses and positive and negative changes. The interpretation and summary section below indicates what is evident. Figure 6.9 indicates the results for C1 only, while Figure 6.10 depicts the frequencies once the C2 data have been added.

***(a) Results: C1***

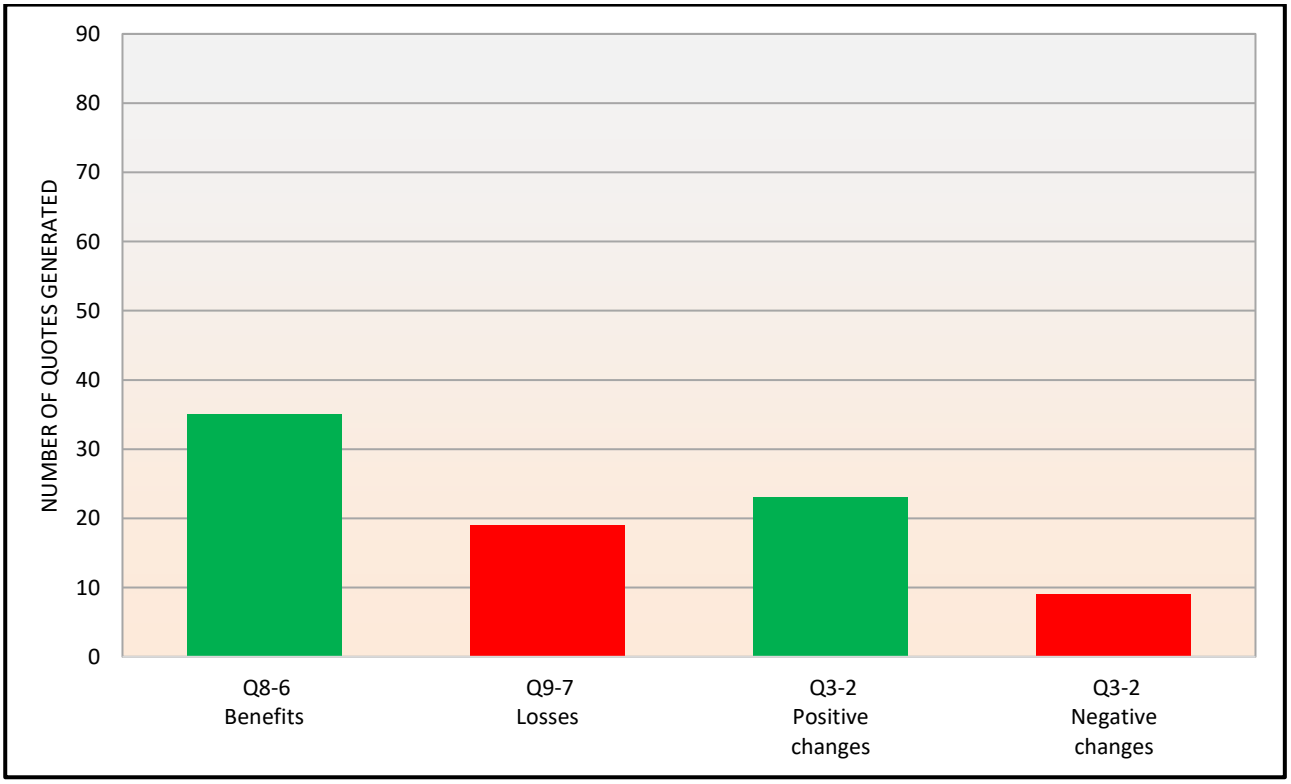



Figure 6.9: Cross-question comparison: C1 only (PGR/M)

***Interpretation and summary***

C1 identified significantly more benefits than losses, and significantly more positive changes than negative changes.

Overall, these results are encouraging. The top benefits were tangibles ('Support for schools and higher education' and 'Employment'). Several positive changes were mentioned. The top positive changes concur with the top benefits, namely 'Education/training' and 'Employment'. At lower frequencies, some intangibles emerge such as that the environment is being conserved and inter-cultural contact.

***(b) Results: C1 and C2***

In Figure 6.10, the C2 data are included to see whether this affects the results. Two C2 quotes related to there being no losses (Refer to Section 6.3.8.3) and, hence, these cannot merely be added to the graph since they will appear as actual losses. The dotted rectangle in the losses bar thus indicates the section of the bar which one cannot consider in the analysis below.

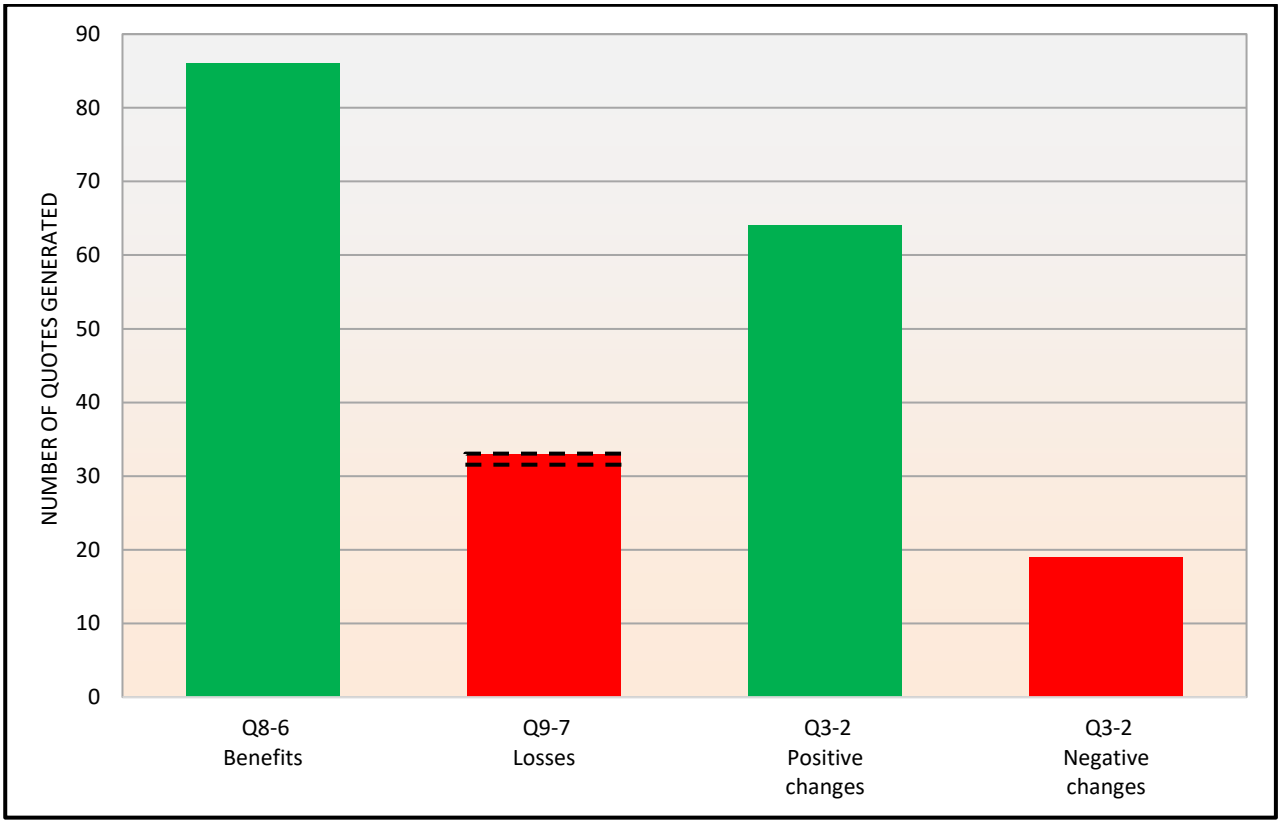



Figure 6.10: Cross-question comparison: C1 and C2 (PGR/M)

***Interpretation and summary***

The frequency of benefits and positive changes increases considerably once C2's answers were added (increasing by 51 and 41 respectively). Losses and negative changes increase slightly (14 and 10

respectively). Three losses are not counted as such since two C2 participants said there were no losses, and one, reflecting on loss of natural resources, said it was not a loss because of the other benefits gained. Hence three are 'discounted' from the picture by means of the dotted rectangle. It is expected that the frequency in all the questions would increase as a result of adding more data. However, the fact that benefits and positive changes increase far more than losses and negative changes indicates that C2 is very positive regarding what local people get from the reserve.

#### *6.3.10.2 Comparing frequencies of answers: Relationship, Negative changes, Positive changes, More positive, Responsibilities, Benefits and Losses*

The purpose of the scatter graph (Figure 6.11) is to compare the frequency of responses of C1 and C2 to these questions, and only those with wide and/or interesting discrepancies (indicated with red frames) are discussed in the interpretation and summary below.

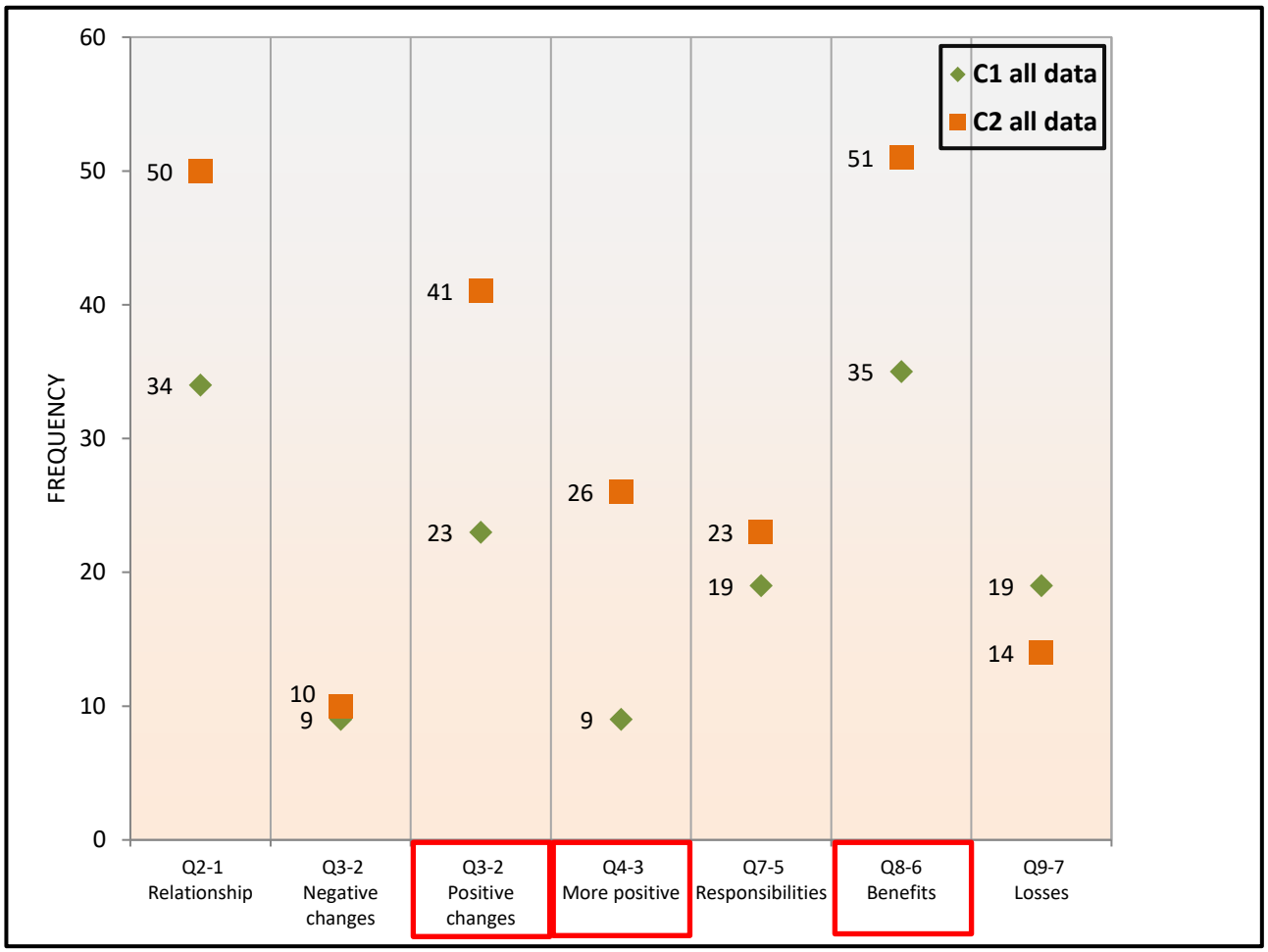



Figure 6.11: Quote frequency comparison across questions: PGR/M

***Interpretation and summary***

In this case study, C2 had much to say, perhaps because of the success of the model and the many years of working with the community. C2 are more vocal regarding the **relationship** between the local

community and the reserve, but there is a strong sense of positivity regarding this relationship from both constituencies. C2 also mention several more **positive changes** and **benefits** than C1 (C1:23; C2:41 and C1:35; C2:51 respectively). However, C1 still has a good amount to say and there is a fair degree of agreement on what constitutes positive changes. In terms of benefits, there are some differences regarding what each constituency identifies. For C1 and C2, **negative changes** are low and very close. The question on **losses** is the only one where C1 have more quotes than C2. Considering that three of the losses from C2 cannot be counted as such, the number of quotes is more akin to C1:19 and C2:11. There is an almost even amount of quotes pertaining to a sense of **responsibility**. C1 knows they have a responsibility and take it seriously, and C2 rely on C1 having a sense of responsibility. Another discrepancy emerges with '**More positive'** (C1:9; C2:26). C2 have far more ideas on improving positivity. It is positive that C1 did not feel the need to mention too many ways of improving positivity, suggesting an existing satisfactory state of positivity.

#### *6.3.10.3 Most common words used*

To end the cross-question analyses, a word cloud is used as a data visualisation tool to present the most common words emerging from all the Phinda documents combined (i.e. all transcripts from the FGIs and IIs, and all notes generated during NGT). Figure 6.12 presents all words used 20 times or more, with the word size indicating how often it was used. The word 'community' is by far the most common with


Figure 6.12: Most common words emerging from PGR/M participants

'people', 'reserve', 'Phinda', and 'animals' following. Among these most frequent words is a fairly even spread between people-focused words and nature-focused words, with the former being slightly stronger. In the next tier of words, benefits emerge strongly with words such as 'jobs', 'schools', benefits' and 'children'. 'Environment' and 'nature' also appear, but to a much lesser extent.

## 6.4 Chapter 6 summary

Chapter 6 presented the data for Case Study 3: Phinda Private Game Reserve/Mnqobokazi. It began by explaining the management and ownership structures for Phinda, followed by a background on the reserve and the community of focus, namely Mnqobokazi. The responses from both constituencies were analysed for each question put to participants, with an overview being provided, followed by the specifics of the data and then a summary. This chapter covers several research objectives, and contributes towards addressing them by analysing the PGR/M data. In Chapter 7, the research objectives are addressed again in the form of cross-case analysis, where the findings from all three case studies are considered. In the final chapter (Chapter 9), each research objective is briefly revisited.

Section 6.3.1 (Knowledge and experience) consisted of three groups of questions and addressed Research Objective 2. Sections 6.3.2 and 6.3.5 (Relationship and Others' views) answered Research Objective 3. The data on Responsibilities towards the reserve addressed Research Objective 5 (Section 6.3.6); while Research Objective 6 was covered by Sections 6.3.4 and 6.3.9 (Increasing positive attitudes and Dreams for an ideal future). Finally, Research Objective 4 was covered by four questions, dealt with in Section 6.3.3 (Positive and Negative changes) and Sections 6.3.7 and 6.3.8 (Benefits and Losses). Section 6.4.1 below draws the responses from all four questions (Positive and Negative Changes, Benefits and Losses) together in the form of a summary.

A few cross-question analyses were also considered towards the end of the chapter. Chapter 6 is drawn to a close by the creation of a summary for Case Study 3 from the perspective of C1 and C2 (Section 6.4.2), followed by a holistic summary to address the research aim for this particular case study (Section 6.4.3).

The three case study chapters fulfill the first layer of data analysis and interpretation. The second layer occurs in Chapter 7 (Cross-case analysis and interpretation) and the third and fourth in Chapter 8 (Theory, recommendations and framework). Chapter 9 concludes the study.

### 6.4.1 Summary of benefits, losses and other factors influencing attitudes and behaviour

Research Objective 4 sought to identify the benefits received and losses incurred by the local community, as well as other factors which could influence attitudes and behaviour towards the

protected area. In this section, the researcher **drew from each question asked of participants in order to answer Research Objective 4 for the Phinda/Mnqobokazi case study**. In Chapter 7 (Cross-case analysis and interpretation), findings are drawn from all three case studies to address this objective definitively.

**(a) Benefits and losses**

*Benefits*

- Several education-related benefits are recognised, such as infrastructure for schools and bursaries for tertiary education.
- The Environmental Education Programme (EEP) in schools is often mentioned, and has increased environmental understanding and positivity towards the reserve.
- Employment is a clear benefit and has a positive spin-off for many families.
- Skills training emerges as a positive change.
- The rental income earned by the trusts not only benefits beneficiaries, but is also used for the wider community.
- Donations of meat for community events features as a positive change.

[Other infrastructural benefits (besides schools), sponsorships for community facilities, and benefits from tourism/tourists exist, but locals are not mentioning these. Therefore, these may not be contributing as much to positive attitudes as they potentially could].

*Losses*

- Fear of wild animals – for humans, livestock and property damage – is mentioned.
- The perception of unfair employment policies causes negativity.
- It is difficult/pricey for locals to visit the reserve as tourists.
- Some locals are negative about loss of land, but the majority perceive Phinda and the resulting benefits as better than having access to the land.
- Insufficient career advancement to management level.
- Employment of non-locals makes people negative.

**(b) Other factors**

- Locals show appreciation of nature and its conservation for future generations; some take it upon themselves to teach others about this.
- Inter-cultural contact is identified as a positive change.
- Good communication networks, particularly at leadership and trust level are acknowledged.
- The good image of Phinda in contrast to other neighbouring reserves is acknowledged.
- Locals feel a sense of responsibility to protect the reserve and do report suspicious behaviour, particularly from outsiders. However, there is a real fear of reprisals. It also appears that a wariness exists to report subsistence bush meat poaching.
- Involvement and beneficiation appear to reduce poaching. Less poaching occurs by members of the Mnqobokazi and Makhasa communities.

[Interaction and collaboration, particularly at leadership and trust level emerge strongly from C2, but are not featuring much at C1 level. This could be because C1 are used to good interaction].

### 6.4.2 C1 and C2 summary

This was achieved by taking the 'Summary' sections at the end of each question and simplifying them into a table (Table 6.25). This summary (which assists in reducing the data) still presents C1 and C2 **separately**, and according to each section (Sections 6.3.1 to 6.3.10). The summaries for all three reserves are used in the cross-case analysis (Chapter 7). Various notations are used to aid the summary that follows, namely > (greater than), = (equals) and & (and).

Table 6.25: C1 and C2 summary: Phinda Private Game Reserve/Mnqobokazi community

| C1 | C2 |
|---|---|
| **KNOWLEDGE AND EXPERIENCE OF PROTECTED AREA** | |
| Average to good knowledge of reserve | |
| Most have entered for work or as part of a programme | |
| Strong focus on programmes for educators, children, tribal authorities & trust members. This results in C1 learning about conservation & animals | |
| No one entered as a traditional tourist | |
| In spite of visiting reserve, C1 did not show detail of reserve in their maps | |
| Express range of positive feelings: life changing experiences; fear & myths dispelled; & skills learnt | |
| Fear of wild animals exists | |
| Awareness of Phinda as job creator & supporter of C1 via various benefits | |
| Awareness of animals & what reserve is used for | |
| Aware of lodges & tourism | |
| Natural resources do not feature in the context of access or lack of access | |
| No negative codes used | |
| **RELATIONSHIP BETWEEN COMMUNITY AND PROTECTED AREA** | |
| Good strong well-established relationship | |
| Recognise several education-related benefits e.g. schools, Environmental Education Programme, bursaries. | |
| Appreciate general care that Phinda shows for community | A leading model that others want to learn from |
| Minor mention of earning opportunities | Started following new philosophy years before & work very hard at this relationship |
| Make strong link between poaching & poverty, & feel that more employment will help to curb poaching. Conservation important but hunger can change the way local people feel. They want to solve poaching problem. | Attest that good relationships & benefits decrease poaching; & that better relationships are required in communities where poaching is an issue |
| Show appreciation of nature & of its conservation for future generations | Employment is key & impacts many families in the community |
| Feel that the land is in good hands | The success of the trusts is mentioned often – rentals & good working relationship |
| Fear of wild animals is minor | Highlight strong communication networks with trusts & tribal authorities |
| | Want to take things to next level with community development plan |
| | Challenges are: trusts need to become more independent from reserve staff; benefits are diluted with growing communities; & with the success experienced in Phinda communities, C1's expectations have increased |

| C1 | C2 |
|---|---|
| **POSITIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| Say less regarding positive changes than C2, but still have good amount to say | More vocal on positive changes |
| Mainly recognise tangible positive changes | |
| Education/training and Employment are key positive changes | |
| Under education, recognise bursaries & schools | Highlight training & Environmental Education Programme |
| Acknowledge that it is better now than before Phinda came | |
| While acknowledging development, no mentions of infrastructure apart from schools | Significant infrastructural gains mentioned |
| No mentions of collaboration/contact & revenue sharing | Vocal on collaboration/contact (real intentionality re communication with trusts/tribal authorities) |
| Mention donations of meat for community events | |
| | Mention several community projects not acknowledged by C1 |
| Inter-cultural contact for employees & community | |
| Environment is being conserved (success story) | |
| | Philosophy positively influencing other reserves |
| | Recognition of benefits is also a positive change |
| | Challenge: when community grows, the positive perception of Phinda is reduced |
| **NEGATIVE CHANGES THAT PROTECTED AREA HAS BROUGHT TO WAY OF LIFE** | |
| Mention fear of wild animals: for humans, livestock & property damage | Struggled to think of negatives |
| Perceive unfair employment policies: dissatisfaction with remuneration; unclear salary categories; & unfair dismissal | Lack of access to natural resources emerged strongest yet seems to be a problem of the past & not mentioned by C1. Harvesting not encouraged due to poaching crisis & unsustainability |
| Other perceptions with low frequency: punishment for subsistence poachers is very harsh & visiting reserve is pricey | Indicate that some C1 are negative re. loss of land |
| | Fear of wild animals could be a negative change |
| | Mention insufficient career advancement for C1 to management level |
| **INCREASING POSITIVE ATTITUDES TOWARDS PROTECTED AREA** | |
| No mention of information, involvement & interaction | Aware of need for information, education, plus involvement & interaction – it's key to understanding importance of conservation & to linking wildlife/tourism to benefits received |
| Desire more bursaries & training that leads to employment | C2 work hard at ongoing communication & interaction |
| | Conservation lessons (EEP) – potential future flagship; rhino dehorning with tribal authorities – cutting edge initiative |
| | Acknowledge these positivity builders:<br>target new people; keep going to C1; highlight benefits; tell leadership what's going on; involve key leaders at management level; enable more C1 management positions; & facilitate more access to reserve |
| Only mention tangibles | Several tangibles in place, but more intangibles are being suggested for the future |
| Education-related infrastructure | |
| Employment | |
| **OTHERS' VIEWS ON PROTECTED AREA** | |
| Very positive overall | |
| Good image acknowledged (not the same for other reserves); C1 caught poachers | |
| Positive but want more employment, particularly from other reserves | |
| Negative because: non-locals are employed; lack of opportunity to advance to management level; lack of access to medicinal plants for traditional healers; & request bush meat for poor households | |

| C1 | C2 |
|---|---|
| **RESPONSIBILITIES TOWARDS PROTECTED AREA** | |
| C1 protect reserve – have important responsibilities which they take seriously | |
| Many references to poaching: C1 inform, take action & know reporting structures. Both acknowledge that anonymous reporting would help | |
| Poaching – real fear of reporting & reluctance to report minor offences | Trust contributes to community guards & park development |
| Tribal authorities communicate the importance of Phinda to the community | Actions to protect reserve – interaction/involvement is key ingredient:<br>- with C1 leadership: interact; involve in key events; & get information re shortcomings in relationship<br>- with general community: communicate; remind of benefits; & encourage C1 to see themselves as active protectors |
| C1 take it on themselves to teach importance of conservation | |
| Ideas from C1 to protect reserve: environmental education is important; & request Phinda to take more responsibility for damage caused by escaped animals | |
| **BENEFITS DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Top: Support for schools & higher education > Employment > Learning/training about environment & Learning /training in new skills | Top: Sponsorships for community facilities > Support for schools & higher education > Employment & Learning/training about environment & Successful land claim |
| Ranking regarding the most important benefits to C1: Agree on education & employment, then skills & programmes, but differ on the rest | |
| Too few C1 get to enjoy/experience reserve as tourists | C2 mention more benefits than C1 |
| | C2 highlight these which C1 don't: sponsorships for community facilities; land claim; & benefits from tourism/tourists (latter 2 have emerged in other questions) |
| Both focus more on tangible benefits | |
| **LOSSES DUE TO HAVING PROTECTED AREA NEAR YOUR HOME** | |
| Top: Fear of wild animals > Lack of job security & Loss of land/can't farm > Livestock get diseases from wildlife & Visit limitations | Acknowledge Loss of access to medicinal plants. Acknowledge Loss of land/can't farm, but feel that more benefits flow with Phinda leasing the land |
| Lack of opportunity for locals to attain management positions | |
| Access to natural resources is barely an issue | There are no losses. More gains; C1 don't speak negatively about Phinda |
| **DREAMS FOR AN IDEAL FUTURE** | |
| | Dreams relate to people & their wellbeing. Intentionality of C2 emerges again |
| Top: Employment = A MATCH (C2 mention range of employment/SMME options) | |
| Request recycling project/depot | Development needs also emerge e.g. water & infrastructure |
| | Keep youth healthily active |
| C1 want skills development plus C2 want range of skilled locals to assist reserve = A MATCH | |
| Want to have shares in reserve | Have trusts running at maximum level & managing social development projects |
| | Improved education |
| C1 want to be part of leadership & management plus C2 want locals at this level = A MATCH | |
| | Have conservation authorities buy in more willingly into social development projects; have them & C1 all on same page |
| | Phinda model is good and works – but involves much effort, a long time, & frustrations along the way |
| | While social development is central, dreams continually link to environment & conservation |
| **CROSS-QUESTION ANALYSES** | |
| Identify significantly more benefits than losses, & more positive changes than negative changes | When including C2's answers, benefits & positive changes increase considerably; while losses & negative changes only increase slightly, i.e. C2 is very positive regarding what C1 get from reserve |
| C1 do not mention much under improving positivity, suggesting existing satisfactory state of positivity | C2 always said more, except under losses |
| Community appear to be very positive overall | Fair amount of agreement on what the positive changes are, but some differences in the benefits identified by C1 & C2 |
| | C2 have far more ideas on improving positivity |

### 6.4.3 Phinda Private Game Reserve/Mnqobokazi community summary

The final step in each of the case study chapters is to combine the results from C1 and C2 to create a holistic summary for this case study, which reduces the data further. This was done by using Table 6.25 to extract the necessary information to answer the research aim for **this** case study. The reader is reminded that the research aim for the study is to **identify, investigate and represent the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas**.

The answer to the research aim for the Phinda Game Reserve/Mnqobokazi Case Study is divided into:

- context (taken from the cross-question analyses);
- present situation ['We are positive (+) because ...' and 'We are negative (–) because ...'];
- factors that could make local people more positive (+) in the future; and
- constraints (challenges identified in the analysis).

In addition to '+' and '–', various notations are used to aid this summary, namely > (greater than), = (equals); LC (Local Community) and & (and). The direction of the thumb also indicates the overall level of positivity for this particular case study.

Figure 6.13 thus presents the PGR/M case study summary. This contributes to the cross-case analysis in Chapter 7. In Chapter 8, the holistic answer to the research aim and question (drawn from for **all three** case studies) is provided in the form of a theory and a framework.

## PHINDA PRIVATE GAME RESERVE/MNQOBOKAZI COMMUNITY

**What influences attitudes and behaviour of local community towards protected area?**

**CONTEXT = VERY POSITIVE**

Benefits & Positive Changes > Losses & Negative changes

Clear positivity exists

Here & Now

Mostly focus on tangible benefits

| WE ARE ✚ BECAUSE | WE ARE ▬ BECAUSE |
|---|---|
| Get employment & skills training | Fear wild animals harming people & livestock |
| Widely recognise support for schools & higher education | Want more employment |
| Phinda cares for the community | Insufficient career advancement to management level |
| Strong well-established relationship | Perceive employment policies to be unfair |
| Entering reserve is powerful experience & results in LC learning about conservation & animals | Unhappy that non-locals are employed |
| See value of School EEP programme | Loss of land (but some say it is better now) |
| Appreciate nature & conservation for future generations & spread this message | Strong link between poaching & poverty: need more jobs & help for poor families; & will not report minor offences |
| Ongoing interaction with C1 leadership e.g. enter reserve, rhino dehorning | |
| Operational trust & rental income | |
| Genuine intent from C2 to see C1 benefiting & uplifted. C2 work hard at communication/interaction | |
| Feel that the land is in good hands | |
| Phinda has good image in contrast to other reserves nearby | |
| Help to protect reserve & take responsibility seriously. Sense of custodianship | |
| Gain inter-cultural contact | |
| Get donations of meat for community events | |

FUTURE

**CONSTRAINTS**

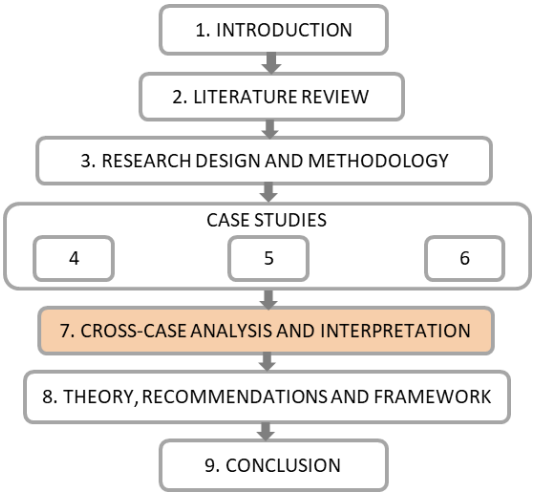
Growing community dilutes benefits & decreases positive perceptions; high expectations from LC; trust needs to become more independent from reserve staff

| THESE COULD INCREASE ✚ |
|---|
| Highlight benefits most important to LC |
| But explain that benefits not mentioned by LC are also key: infrastructure– roads, pipeline, healthcare facilities; sports equipment; community projects; revenuesharing via trusts & its spin-offs; & benefits from tourists/tourism |
| While tangibles are excellent, build on more intangible benefits e.g. pride in reserve, learning about nature & inter-cultural contact |
| More communication/interaction with wider community (apart from tribal authority & trusts). Key to aiding understanding of conservation/reserve & linking it to benefits |
| Encourage career advancement to management & leadership level. Will also help LC gain understanding of running/economy of reserve |
| Acknowledge perceptions of unfair employment policies & address by means of communication to staff &/or changing policies |
| Increase opportunities to visit reserve (visits are powerful & empower LC to influence others) |
| Create opportunities for LC to enter as conventional tourists (consider dual pricing & special packages) |
| Create anonymous reporting structures for reporting poaching; consider dealing differently with subsistence poachers (e.g. via tribal authority); & assist households in dire need (to decrease bush meat poaching) |
| Increase environmental education across the community |
| More communication on human-wildlife conflict – procedures & statistics |
| Have Phinda being seen to take more responsibility for damage caused by escaped animals |
| Recycling facility at Mnqobokazi – job creation & keep environment clean |
| More employment & skills training. Avoid employing non-locals |
| More education-related infrastructure & bursaries |

Figure 6.13: Phinda Private Game Reserve/Mnqobokazi community summary

# Chapter 7

# Cross-case analysis and interpretation




*"52% – Percentage decline in wildlife populations worldwide from 1970 to 2010".*

(TIME Magazine, 13 October 2014:4)

*"When a child is starving, a family may not be able to think about long-term sustainability or damage to ecosystems that support endangered species".*

(Helene D. Gayle in Conservancy Talk, 2013:n.p.)

## 7.1 Introduction

> "Without interpretation, we cannot make sense of our data. As qualitative researchers, we aim to find out more about people's experiences, their thoughts, feelings and social practices. To achieve this … we need to make connections between different components and aspects of the data to increase our understanding. In other words, we need to make the data meaningful through a process of interpretation" (Willig, 2014:136).

Chapters 4, 5 and 6 constituted the first layer of analysis and interpretation. This chapter forms the **second layer of analysis and interpretation.** It aims to make connections by **comparing** the findings from the case studies to draw out the most pertinent influences on pro-conservation attitudes and behaviour in communities bordering protected areas. Cross-case analysis must consider all the data (Yin, 2009), which in this study comprised three different case studies across South Africa, purposely chosen for their differences. The cases had contrasting management models and ownership structures; and were at different stages in the level of improvement in human wellbeing offered to the adjacent community. Dinokeng Game Reserve in Gauteng province is a public-private partnership between private landowners and provincial government. It offers a range of tourism establishments, from budget to luxury. Since it is a fairly new reserve, some economic and social upliftment programmes for the peri-urban community of Kekana Gardens are in place, with more being planned for the future. Mkhambathi Nature Reserve in the poverty-stricken Eastern Cape province is a provincial reserve on community land, jointly managed by ECPTA and the community-run MLT. Accommodation and facilities have deteriorated over the years, with only a few mid-range options currently available. Reserve staff have worked with the rural Khanyayo community (and others) for a number of years and run various upliftment programmes. Finally, Phinda Private Game Reserve in KwaZulu-Natal province is run by &Beyond, which

is an award-winning organisation offering high-end tourism. The land is partly private, with some of it owned by local communities, including the Mnqobokazi community. Africa Foundation works alongside &Beyond, focusing on community involvement and beneficiation. The relationship has been established over many years, with various upliftment programmes in place for this rural community.

To undertake the comparison across case studies, the researcher consulted the question-by-question summaries produced in Chapters 4, 5 and 6 (found at the end of each question) and the final summaries (in Tables 4.25, 5.25 and 6.25 and Figures 4.13, 5.13 and 6.13), together with the data for each question (using the tables within the case study chapters). Furthermore, bar graphs which depict all the data for a particular question across the three cases, are presented in this chapter to support the analysis and interpretation. **The discussion within each research objective is hence drawn from all the above sources.** This chapter therefore plays an important role in reducing the data, while making connections that increase understanding of the research aim.

The analysis in Chapter 7 is done **per research objective**, whereas the analysis in the case study chapters was done per question asked to participants. Some research objectives encompass two or more of these questions. Where relevant, the cumulative responses of the **local community (C1) and reserve staff (C2) are compared** to establish where the perceptions differ across the three cases, and how, through practical actions, these perceptions can be aligned to improve the relationship. The research objectives dealt with in Chapter 7 are Research Objectives 2 to 6. Research Objective 1 was achieved in Chapter 2, and Research Objectives 7 and 8 are covered in Chapter 8.

Within the figures and text of this chapter, the case studies will **not be referred to as DGR/KG, MNR/K and PGR/M, but to Dinokeng, Mkhambathi and Phinda** respectively. In addition, where codes could be simplified without interfering with the reader being able to follow the analysis, this has been done. While these codes were logical in the tables of the case study chapters, some bar graphs benefited from shorter codes. For example, if the prefix to a code such as 'Tangible benefits for community structures' was not necessary in order to understand the analysis, then it was removed. Likewise, a code such as 'Employment: Benefit from jobs' was simply referred to as 'Employment'. However, most codes have remained unchanged.

While bar graphs are used to display the data and aid interpretation, the discussion in this chapter remains **qualitative**. However, according to the research process followed to reduce the data, quotes from participants are no longer required at this point. The essence of the data in the form of quotations has been aptly captured by the analysis and interpretation conducted in each case study chapter, and encapsulated within the summaries in these chapters. Therefore, while this chapter does not refer to individual quotations, it is upon these that the summaries were based, and hence the **voices of the participants are still strongly present**.

A key part of the cross-case analysis is the identification of **meta-themes** for each research objective. These themes transcend the codes, and are at a higher level of abstraction (MacQueen & Namey, 2012). They address what Yin (2009) refers to as the most important issue, in this case to determine the influences on pro-conservation attitudes and behaviour. To be identified as a meta-theme, it had to emerge strongly from the cross-case analysis for a particular research objective.

If a meta-theme recurred within another research objective, this made it even stronger and it would then be noted as '**strengthening an existing theme**'. These are indicated to the reader via an asterisk and the research objective where it originally became a meta-theme. For example, '(*RO 3)' following a meta-theme, means that this theme became a meta-theme under RO 3, and has now emerged again under another research objective, thus strengthening it further.

**Comparison back to the literature** of Chapter 2 takes place following each set of meta-themes and constitutes the **second stage of literature comparison** within this research. This comparison took place after the cross-case analysis was complete, and after the theory in Chapter 8 had been constructed. If previous research confirms, conflicts with or is complementary (adds further insight) to a meta-theme, this is mentioned the first time the meta-theme emerges. In other words, if the meta-theme recurs later in a different research objective, the literature comparison is not repeated. If, however, a meta-theme recurs but with a new element to it, this new element will be compared with literature at this point. The reader is reminded that the main findings of the literature review (Chapter 2) are summarised in Figure 2.13. **In this chapter, 'Research Objective' is abbreviated to RO, and 'Meta-theme' to MT**.

At the start of this chapter the reader is pointed to Table 7.3 (situated at the end of the chapter). Table 7.3 presents a summary of the meta-themes identified for each research objective. Furthermore, these are colour-coded to assist in observing the prevalence of a meta-theme across the different research objectives. It will be helpful to the reader to consult this table while reading through this chapter.

Figure 1.3 in Chapter 1 will remind the reader of the research process and diagrammatically depicts the role of each chapter in the overall study. In Chapter 8, the third layer of analysis and interpretation occurs, which is to construct a data-derived theory and recommendations, by drawing from the meta-themes in this chapter. The fourth and final layer of analysis and interpretation also takes place in Chapter 8, where components from the theory are integrated with components from existing literature to develop an integrated framework.

Figure 7.1 depicts the layout of Chapter 7.

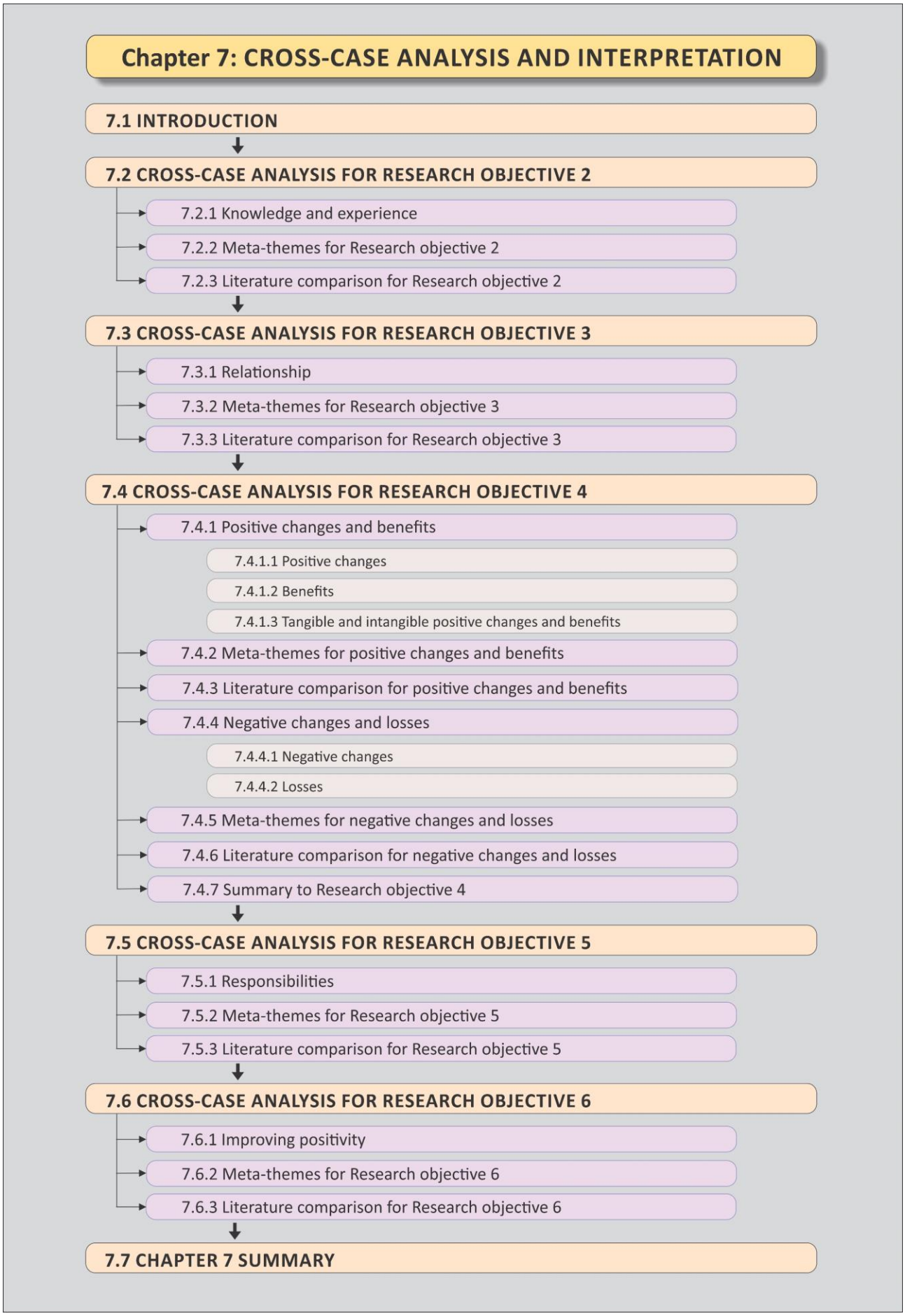



Figure 7.1: Chapter 7 layout

## 7.2 Cross-case analysis for Research Objective 2

**RO 2: To probe the knowledge and experiences of community members regarding the protected area**

### 7.2.1 Knowledge and experience

This research objective only concerns C1 and is addressed by Questions 1, 6 and the mapping exercise. The reader can refer back to Table 3.1 in Chapter 3 for a reminder of the questions asked in the research instrument. Figure 7.2 presents the cumulative results for Questions 1 **and** 6. Codes relating to Question 1 on knowledge have 'K' as a prefix; while those relating to Question 6 on experience have 'EX' as a prefix. Each reserve is depicted in a different colour. Furthermore, this bar graph is ordered with the codes which were cumulatively used the most (after combining the data from all three cases) situated on the left, and then moving to the right in descending order.

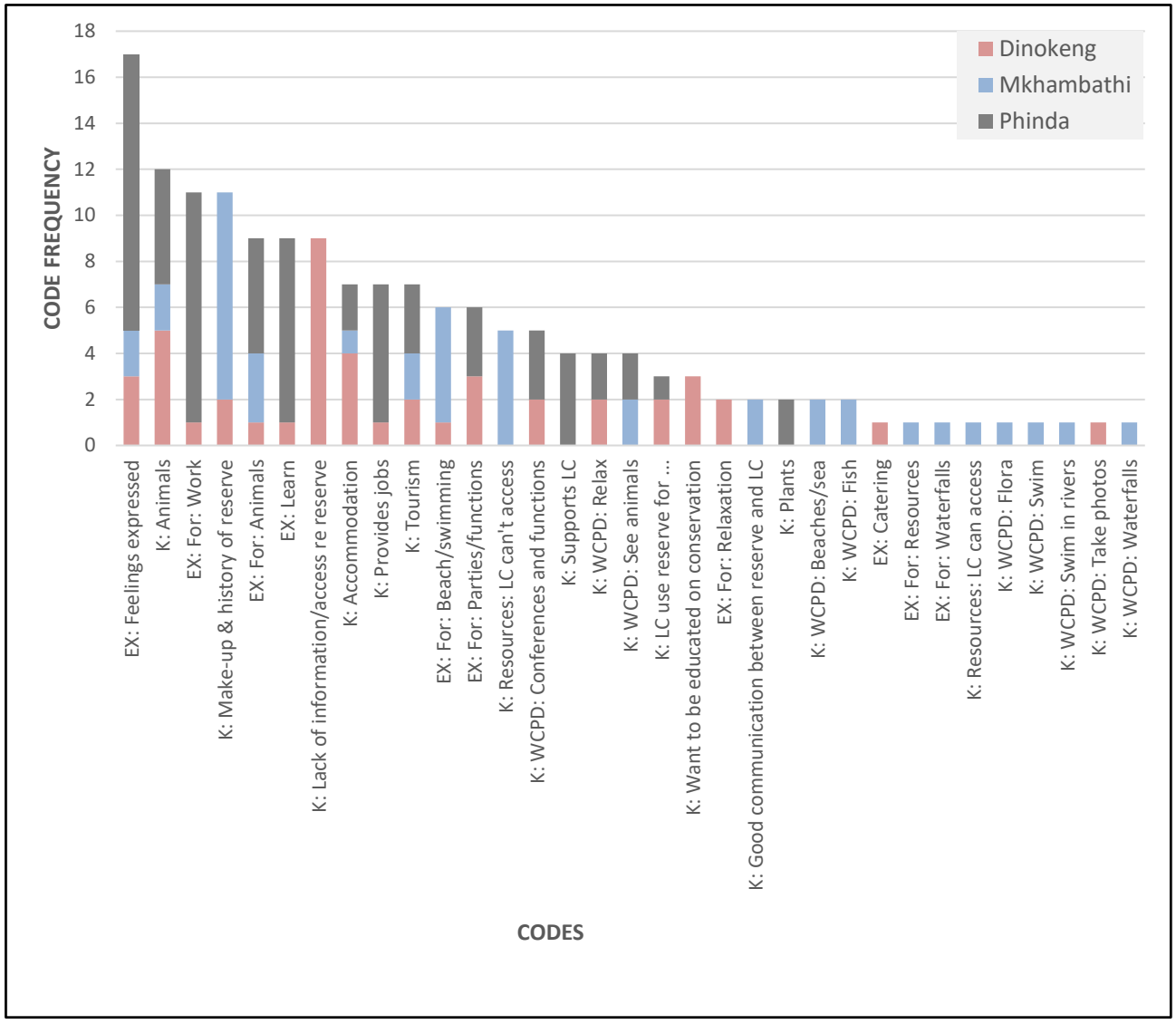



Figure 7.2: Knowledge and experience: Dinokeng, Mkhambathi and Phinda

(KEY: EX = Experience; K = Knowledge; LC = Local community; WCPD = What can people do)

Dinokeng participants had poor to average knowledge of the reserve. Mkhambathi and Phinda participants had average to good knowledge of the reserve, with the majority of participants having been into the reserves. At Mkhambathi they had mainly entered as tourists to visit the beach, while at Phinda they had entered for work or as part of a programme. In Section 7.4.1, the fact that Mkhambathi locals enter the reserve to gather thatch grass emerges, but it was not mentioned in the responses to these questions. In all six maps in the mapping exercise, participants used much less of the page to depict the reserve than they did to depict their community. Mkhambathi participants were the most detailed in their maps, and this was the only case study which showed equal detail for the reserve and their community. For the other two case studies, the communities' living environments were more detailed than the reserve. Considering that 70% of Phinda participants had been into the reserve, the lack of detail was surprising. The detail in the Mkhambathi maps could be due to the fact that 93% of the group had been into the reserve and/or the fact that they had been in for recreation, mainly to visit the beach. This group also alluded to a range of activities that people could do in the reserve. It would appear that the Phinda participants, entering for work and/or as part of programmes, were less familiar with reserve layout and geography than the Mkhambathi participants who went in as visitors.

The figure indicates that Phinda participants were the most expressive regarding the positive feelings they experienced. For the majority of Mkhambathi participants and the few Dinokeng participants who had entered, it is also clear from the quotes that people thoroughly enjoyed visiting the reserve. This aptly demonstrates the power of visiting protected areas, which can even be a life changing experience. In the quotes, participants noted a desire to learn from the reserve (EX) and to be educated on conservation (K). In addition, several codes and quotes revealed that participants know that nature is the focus of the reserves. The presence of animals is known to all (K) and several went in to experience the animals (EX). For the Dinokeng participants, very few of whom had entered, their quotes under 'Knowledge' indicated a clear desire for information on the reserve and how it can be accessed. At Dinokeng and Mkhambathi, community leaders had more to say under knowledge of reserve, while for Phinda, the knowledge appeared to be spread throughout the community. This highlights the importance of ensuring that all sectors of the community are informed. Learning as an experience (EX) emerged strongly for Phinda as well as the fact that Phinda provides jobs and supports the community (quotes for the latter arose from both the knowledge and experience questions). Considering that the question regarding knowledge only asked what people know about the reserve, it is significant that Phinda already emerged here as a provider of jobs and supporter of the community. In terms of natural resources, inability to access certain of these was an issue for Mkhambathi (K), but did not feature for Phinda and Dinokeng. This could be because Khanyayo residents historically had access to the natural resources within Mkhambathi, while the other two communities did not.

Research Objective 2 is hence achieved. In addition, the following meta-themes have emerged.

### 7.2.2 Meta-themes for Research Objective 2

MT 1. Those who have visited the reserve are extremely positive about the experience; while those who have not visited express a desire to do so.

MT 2. Participants show an appreciation of the reserve, noting that nature and animals are the focus, and desiring to learn about conservation and nature.

MT 3. It is important to spread information to all sectors of the community, not only community leaders.

MT 4. It appears that entering the reserve as a tourist increases familiarity with reserve layout, geography and activities to engage in.

MT 5. When a reserve has a good relationship with the community, this is acknowledged, even when the researcher did not ask about the relationship.

MT 6. Former historic access to natural resources makes this a current ongoing issue, and influences attitudes today.

### 7.2.3 Literature comparison for Research Objective 2

Meta-theme 1 (MT 1) is confirmed only by the work of Lee (2013) who posits that opportunities for locals to be tourists is important. Lee also found that these opportunities increased the perception of benefits. This was certainly the case at Phinda and Mkhambathi where visits into the reserve were seen as benefits, and resulted in positive attitudes. MT 4 shows the additional advantage that visits enable locals to know more about the reserve. MT 2 demonstrates an intrinsic appreciation for nature, as was found by Allendorf *et al.* (2018); Gadd (2005) and Tessema *et al.* (2007). MT 2 also reveals a desire to learn about conservation and nature. The reader will discover that this is a recurring finding in this chapter – that C1 want to learn about the environment and their role and impact on conservation. Although results from this study cannot link environmental education directly to pro-conservation attitudes and/or behaviour, its importance as a means to influence attitudes and/or behaviour is reiterated by Imran *et al*. (2014), Owens and Driffill (2008), Stem *et al*. (2003) and Waylen *et al.* (2010). Environmental education is also noted by Swemmer *et al.* (2017) as a means to build capacity. It is therefore an avenue worth pursuing by C2. The desire for communication was mentioned above, with the importance of spreading information becoming MT 3. Mutanga *et al.* (2017), in their study on four protected areas in Zimbabwe and the adjacent communities, also found that communication between communities and protected area staff was an important determinant of this relationship. Irregular and insufficient information/communication is likely to contribute to a negative relationship. MT 6 aligns with Rahman *et al.* (2017) – that those whose livelihoods were traditionally shaped by access to natural resources over time have more dependence on these, whereas newer settlers do not.

## 7.3 Cross-case analysis for Research Objective 3

**RO 3: To seek to understand the relationship between the local community and the protected area**

### 7.3.1 Relationship

Research Objective 3 is addressed by Questions 2-1 and 5. Figure 7.3 shows the cumulative results for 'Q2-1 Relationship', which was asked to both C1 and C2. This bar graph is ordered with the codes which were used the most overall (i.e. according to the total of C1 and C2 for all three cases) situated on the left, and then moving to the right in descending order. Since this graph presents data for both C1 and C2, each case study has its own bar for each code, and within that bar, the C1 and C2 data are differentiated by the colours of green and peach respectively.

In all three case studies, C2 had the most to say about actions taken or planned by the reserve. C2 participants were very aware of initiatives that improve the relationship, while C1 barely mentioned these in the context of the relationship between reserve and community. C1 at Dinokeng and Phinda did, however, express some appreciation of the actions taken by the reserve (such as employment), with education-related benefits being very prominent at Phinda. It is also worth mentioning that in all three cases, C1 expressed intrinsic appreciation of the reserve/nature and were aware of the importance of conservation. For Mkhambathi and Phinda, C2 also referred several times to poaching. C2 participants in all three case studies attested to the fact that poaching decreases when there are good relationships. Phinda C2 participants added that benefits also help to curb poaching; while Mkhambathi C2 noted that education and interaction were key in reducing poaching. In this question, the quotes revealed that Mkhambathi C1 were less aware of poaching; but both Dinokeng and Phinda C1 expressed a desire to decrease poaching, but linked it to poverty. There is an empathy with those who poach due to hunger and an unwillingness to report this sort of poaching. The reader will see this view on poaching expressed again by Phinda C1 participants in Section 7.5. Phinda C1 stated that more employment will help to reduce poaching, while Dinokeng C1 implied that a better relationship with the reserve will help.

Regarding the code 'Relationship is fair to good' there were considerably more quotes for Phinda than for the other two case studies. While C1 at Phinda inferred that a good strong well-established relationship exists, for all three reserves, C2 were more positive about the relationship. In this question, Phinda C1 participants had no quotes for the code 'Dissatisfied with benefits', hence implying that they may be satisfied with benefits. With more funding (due to high-end tourism) at Phinda and the presence of an organisation focusing on community beneficiation and involvement, Phinda is operating on another level. Mkhambathi C1 are not satisfied, which could stem from an historical expectation of benefits due to the land originally being theirs, and them now having ownership over it again following the successful land claim, yet not feeling as if they have much control. At Dinokeng, while C2 acknowledged that C1 were dissatisfied with benefits, this was echoed only slightly by C1, who possibly

do not think in terms of benefits due to being a new community who are not accustomed to receiving benefits from the reserve. Historical context could thus play a role. Phinda and Mkhambathi are similar in the sense that parts or the whole reserve were historically owned by the community, with parts of the land now returned via successful land claims. At Phinda, more benefits are received, and thus C1 did not mention dissatisfaction with benefits; while for Mkhambathi C1, they felt that more benefits should accrue to them. However, while Dinokeng C1 did not complain about benefits, the request to feel more part of it, and have more collaboration/communication/information and access is very clear. This also emerged under 'Q1 Knowledge' in Section 7.2.1.

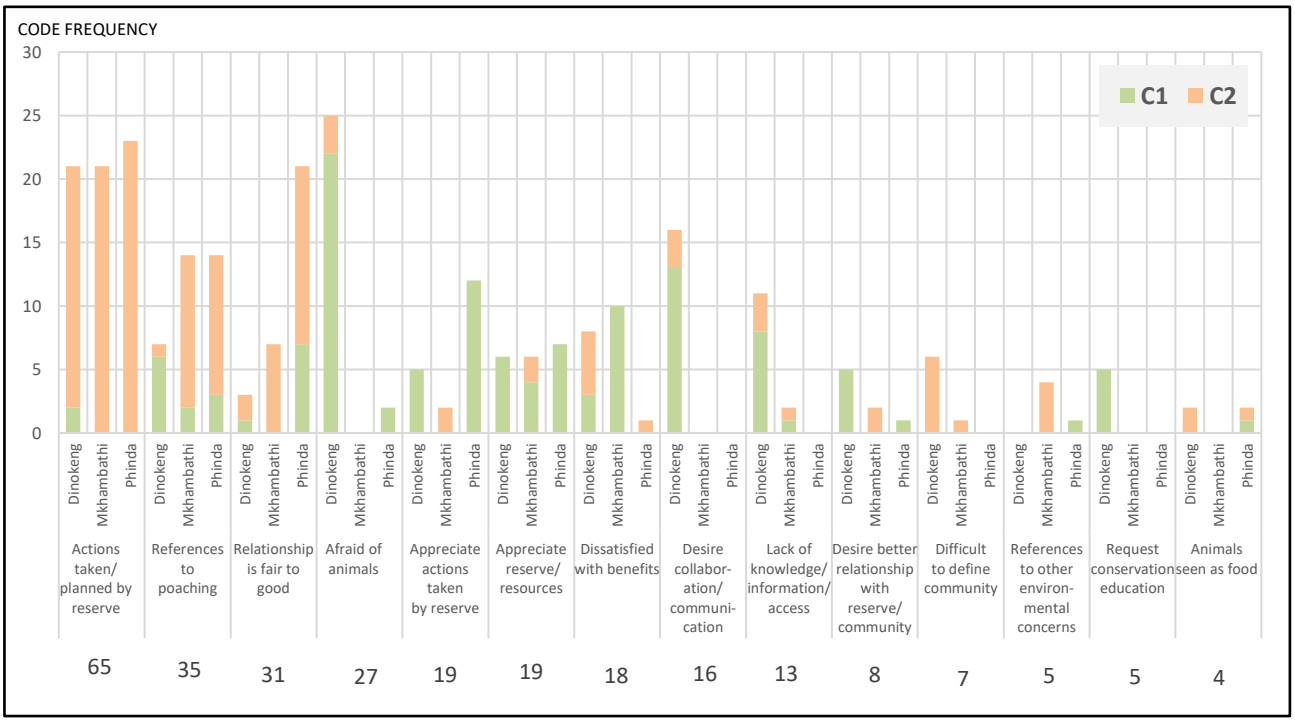



Figure 7.3: Relationship: Dinokeng, Mkhambathi and Phinda

Continuing with seeking to understand the relationship between C1 and C2, Figure 7.4 presents the data for 'Q5 Others' Views', which was asked to C1 only. Participants were asked what their friends and family thought about the nature reserve. In Figure 7.4, the codes have not been ordered according to which had the most quotes, but according to negative and positive codes being clustered together. In total, there were 19 negative views and 15 positive views, which is very close. Dinokeng had by far the most quotes for this question. While Figure 7.4 is helpful in providing an overview, the content of the quotes supersedes this, and hence the reader is reminded that the analysis also draws from the summaries in each case study chapter, which encompass the quotes.

Dinokeng and Mkhambathi C1 shared a mix of positive and negative views of others, while Mkhambathi C1 revealed that others are mainly negative. Based on quote content, Phinda were very positive overall, citing the good image of Phinda in comparison to other reserves close to the Mnqobokazi community, and the fact that locals had caught poachers. As revealed in Section 7.2, as well as in the discussion under Figure 7.3, the desire for information emerged again here for Dinokeng and Mkhambathi C1, with a

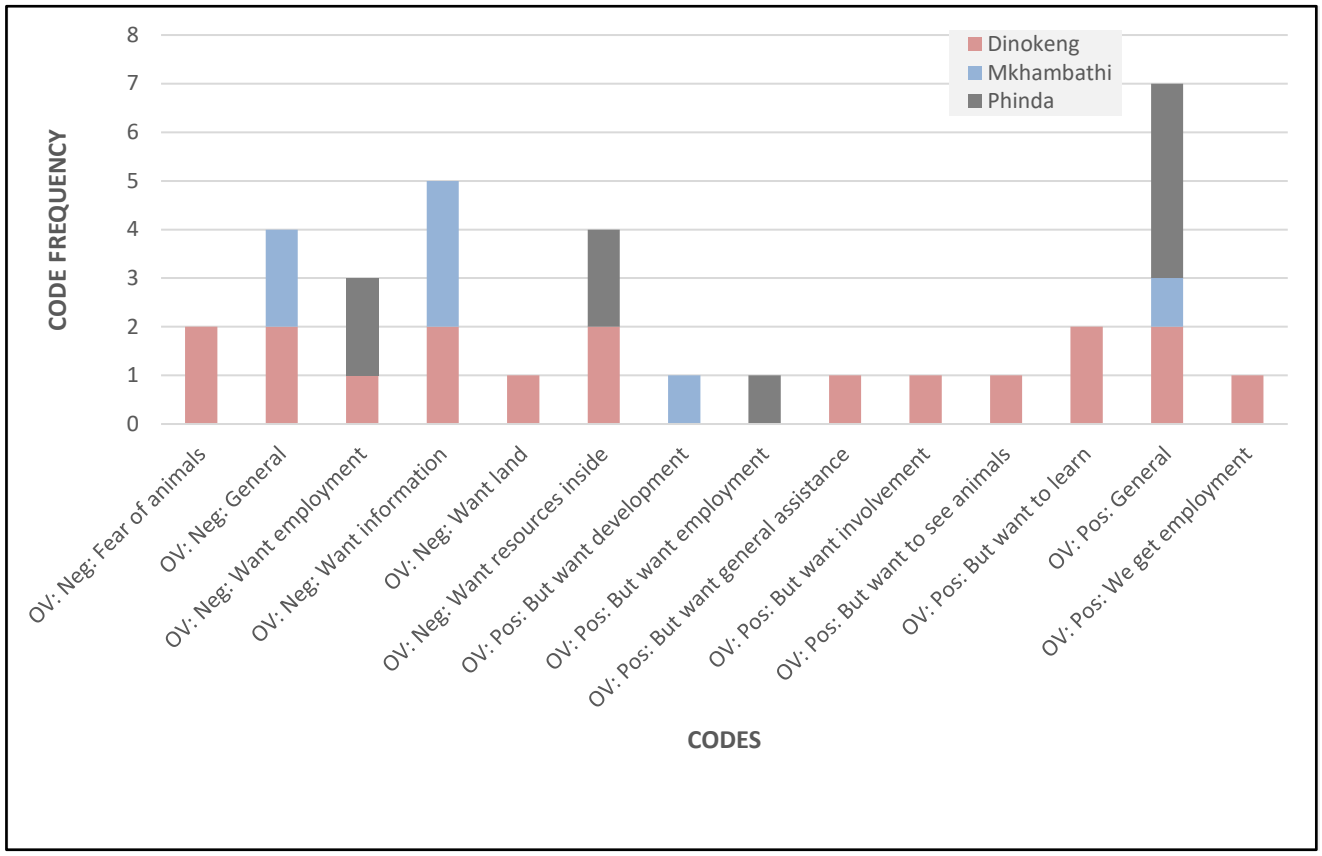



Figure 7.4: Others' views: Dinokeng, Mkhambathi and Phinda

(KEY: Neg = Negative; OV = Others' views; Pos = Positive)

quote from Dinokeng regarding wanting involvement. However, in Figure 7.4 no Phinda participants indicated negativity due to a lack of information. This emerges again under 'Q2-1 Relationship', where, in Figure 7.3, Phinda participants did not voice a lack of information (nor a desire for collaboration/communication), possibly because these needs are fulfilled. The wish for more employment is voiced in all three case studies, with Dinokeng and Phinda C1 voicing discontent that non-locals are employed. This is indicative of the rising unemployment in South Africa, as discussed in Section 2.3. For Mkhambathi community participants, a discussion ensued during one of the focus group interview sessions, in which frustration over lack of employment was mentioned, but the discussion also revolved around lack of development, and is hence coded under this code for Q7-5. Phinda C1 mentioned again that there is lack of opportunity to advance to management level. This theme is unique to Phinda and is perhaps indicative of the level of capacity building programmes in place – that some locals here are ready to move to the next level. In terms of natural resources, Dinokeng and Phinda community participants reported that others want the natural resources inside, while at Dinokeng, a participant stated that some people known to him/her would prefer to use the land for housing. While access to natural resources is not mentioned here by Mkhambathi participants, it is interesting to note that it was mentioned under Research Objective 2 under 'Q1 Knowledge', where the fact that they could not access natural resources emerged. Hence, it will be mentioned below as a meta-theme. Dinokeng voiced the request for more educational opportunities, but were positive because some people are employed, which has improved their lives. They mentioned negativity due to fear of wild animals and

distrust of the boundary wall. An Mkhambathi participant also voiced frustration from lack of tourism development in the reserve.

In conclusion, Research Objective 3 sought to understand the relationship between the local community and the protected area. For C1, factors that impact on the relationship are: appreciation of nature and conservation; the desire for information, as well as some form of involvement/collaboration; and appreciation of actions taken by the reserve. Benefits also emerge in the context of participants sharing regarding the relationship, with differing levels of satisfaction thereof. For both C1 and C2, poaching is discussed in the context of relationship. For C2, the dominant outcome is the various actions/programmes taken by the reserve, and in the case of Dinokeng and Mkhambathi, C2 are more positive about the relationship than C1.

The following meta-themes have become visible in this research objective:

### 7.3.2 Meta-themes for Research Objective 3

MT 1. C2 are far more aware than C1 of projects and initiatives that they feel improve the relationship between reserve and community; and are more positive regarding the relationship.
MT 2. C1 express appreciation of nature and awareness of the importance of conservation (*RO 2).
MT 3. A good relationship helps to decrease poaching.
MT 4. Historical context appears to influence the expectation of benefits.
MT 5. C1 want to curb poaching but link poaching to poverty, empathising with those who poach bush meat out of hunger, and being unlikely to report these incidents.
MT 6. C1 desire information (Phinda C1 participants do not express this perhaps because they already receive it) (*RO 2).
MT 7. C1 want more employment opportunities.
MT 8. The employment of non-locals causes negativity.
MT 9. Lack of access to natural resources causes negativity.

### 7.3.3 Literature comparison for Research Objective 3

Regarding MT 1, Collins (2016) and Infield and Namara (2001) also note that communities sometimes fail to recognise benefits received. The study by Hill *et al*. (2015) of rural communities living inside El Vizcaino Biosphere Reserve, Mexico, showed that while awareness of community owned and run beneficiation projects was low, awareness of projects initiated by the conservation agency/other stakeholders was even lower. Moving from awareness to positivity, Mutanga *et al.* (2017) found that protected area staff were often more positive than the community. This concurs with the findings of this research – that C2 were more aware than C1 regarding beneficiation projects/initiatives; and more positive in terms of the relationship.

MT 3 shows that a good relationship can decrease poaching. Stone and Nyaupane (2018) concur, finding that two years spent building a solid relationship with the Chobe Enclave Conservation Trust resulted in lower rates of poaching. Also linked to poaching, MT 5 revealed reluctance to report minor bush meat poaching. Literature points to disillusioned locals who tacitly or actively support poaching due to costs that they are incurring from the protected area (Ghoddousi *et al.,* 2018; Namara *et al*., 1998; Stone & Nyaupane, 2018). The results in this present research, however, contrast to this, with the finding that those who poach bush meat for survival are unlikely to be reported, not so much because it is 'supported' but due to empathy for poverty-stricken families.

The desire for information (MT 6) is a strong finding in this research. Yet, it is not found as a benefit in the literature. Communication emerges as an important determinant in the relationship between people and parks (Mutanga *et al.,* 2017) (and is briefly discussed under RO 2), but straightforward passing on of information regarding the reserve and its 'goings-on' is not. Yet, this appears to be important to C1.

MT 7 resonates with several researchers (such as Collins, 2016; De los Angeles Somarriba-Chang & Gunnarsdotter, 2012 and Lee, 2013) regarding employment being a key direct benefit, and one of the most commonly cited. In this objective, C1 are requesting more employment. Also regarding employment, MT 8 is consistent with the findings of Mutanga *et al.* (2017); Odindi and Ayirebi (2010); Saufi *et al.* (2014); and Thondhlana *et al.* (2016) who linked the employment of non-locals to negativity amongst locals. Finally MT 9 aligns with several authors in that restrictions on natural resource usage result in negative attitudes (Allendorf *et al*., 2006; Cobbinah *et al*., 2015; Infield & Namara, 2001; Kideghesho *et al.*, 2007; Mutanga *et al*., 2017).

## 7.4 Cross-case analysis for Research Objective 4

**RO 4: To identify the benefits received by and losses/costs incurred by the local community due to the presence of the protected area, as well as other factors that could influence the attitudes and behaviour of the community towards the protected area**

Research Objective 4 is covered by 'Q3-2 Positive and Negative Changes', 'Q8-6 Benefits' and 'Q9-7 Losses'. When looking at what influences pro-conservation attitudes and behaviour, literature predominantly divides responses into benefits (with some authors distinguishing between tangible and intangible benefits) and losses or costs. However, another group emerges, which the researcher loosely terms 'Other factors'. Drawn from Chapter 2, Section 2.6, some of these include participation, environmental awareness, devolving power and taking responsibility. The researcher therefore asked for benefits and losses; as well as the more generally phrased 'positive and negative changes'. The idea was to see whether other factors emerged that influence attitudes and behaviour, but that are not benefits or losses.

Within this objective, benefits, positive changes, losses and negative changes are all presented in their own graph. **Firstly** though, to begin with, Figure 7.5 **compares the responses across all four questions (benefits, positive changes, losses and negative changes).**

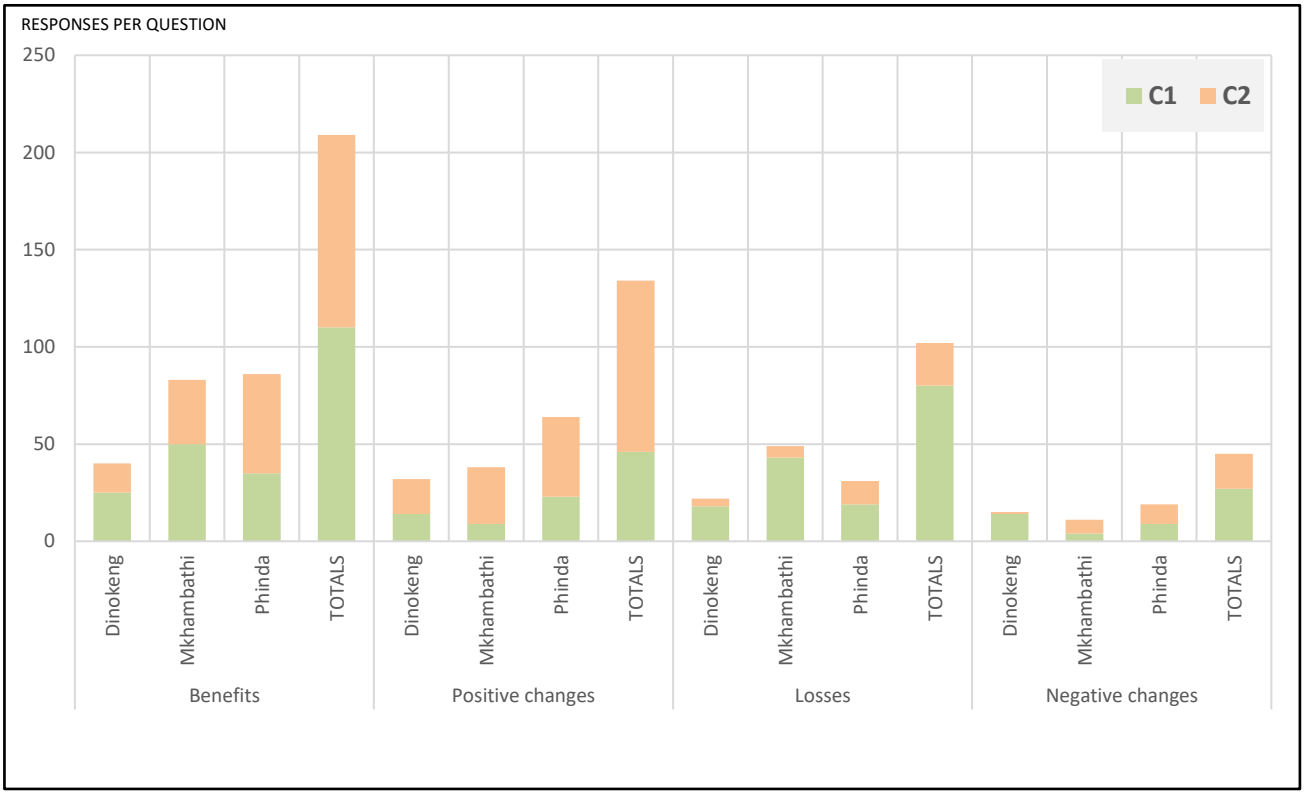



Figure 7.5: Cross-question comparison for all case studies: Benefits, Positive Changes, Losses, Negative Changes

* Where quotes were counted under 'No losses incurred' (in Losses question) and 'No benefits received' (in Benefits question), these were not included in the totals as they would skew results. Therefore some of the totals here will not correspond with those in the case study chapters.

Figure 7.5 is useful for cross-question analysis and shows an interesting pattern: in all three reserves, C1 acknowledged more losses than C2, and in totalling the losses for all three case studies, C1 expressed far more (C1:80; C2:22). While it could be argued that some of these are not losses, or that benefits received outweigh losses, or as mentioned by C2, that there are no losses (See Figure 7.9 and the maroon in Table 7.2), that is not the point – C1 perceive these as losses, and perceptions are powerful in influencing pro-conservation attitudes and behaviour. This raises the need for C2 to acknowledge that the community perceives it in this way, and to address the issue via environmental education, awareness and information provision.

It is interesting that Phinda C1, who have experienced several years of successful beneficiation identified fewer benefits than Mkhambathi C1. Both Dinokeng and Mkhambathi C1 mentioned 10 to 20 more benefits than C2, yet benefits in these reserves are far fewer than the benefits experienced in Mnqobokazi outside Phinda. Could this be because they are used to benefits, whereas Mkhambathi and Dinokeng are more appreciative of the benefits received, even though these are fewer? Could this relate to what a C2 participant at Phinda expressed as a concern, namely high expectations? Phinda C1 also

identified only a few losses, which could indicate that they do not perceive losses, due to the relatively positive situation they are in, compared to the other reserves in this study.

It is encouraging that there are more benefits than losses for both constituencies in all three case studies. In total for benefits, C1 noted 110, and C2, 99; while for losses, C1 noted 80, and C2, 22. Furthermore, for both constituencies in all three case studies, there are far more positive changes than negative changes, except for Dinokeng C1 (who expressed 14 positive changes and 14 negative changes). In total for positive changes C1 mentioned 46, and C2, 88; while for negative changes, C1 had 27, and C2, 18. This figure is referred to again within some of the sections below.

**Secondly**, the different questions within this research objective, are now analysed. **Positive changes and benefits are first analysed separately, followed by a combined set of meta-themes for both, and literature comparison for both. The same is then done for negative changes and losses.**

Due to the large amount of data generated under these questions, only codes used four or more times overall are included. In addition, under 'Benefits', all 'Access to natural resources' codes are merged into one, and under 'Losses', all 'Lack of access to natural resources' codes are merged. The same is done for all codes under 'Visiting reserve'. The graphs are presented with the code that had the highest total overall on the left, moving to the right in descending order. The data label under each code contains the combined total of quotes coded with that code across all three case studies, which is also the sum of C1 and C2's responses.

### 7.4.1 Positive changes and benefits

#### *7.4.1.1 Positive changes*

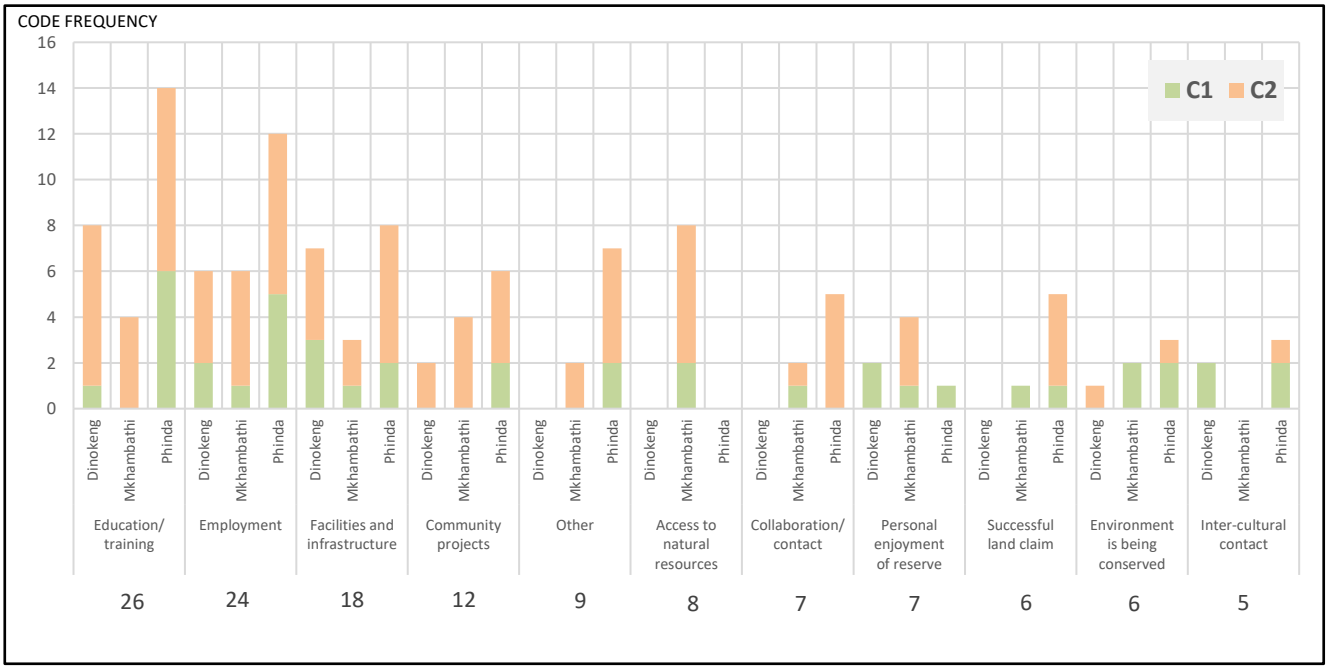



Figure 7.6: Positive changes: Dinokeng, Mkhambathi and Phinda

Figure 7.6 presents the results for positive changes. In all three cases, C2 made more contributions. Figure 7.5 (Cross-question analysis) shows that at Dinokeng it was very close, but at Mkhambathi and Phinda, C2 had respectively 20 and 18 quotes more than C1. This suggests that C2, as was found in 'Q2-1 Relationship' are more aware of positive actions/programmes than C1 are. The totals in Figure 7.5 (C1:46; C2:88) are revealing, with C2 mentioning almost double that of C1. In addition, at both Dinokeng and Mkhambathi, community leaders were more aware of positive changes attributed to the protected area than other community members.

**Education/training** is most apparent under positive changes, but it is predominantly expressed by C2, with the exception of Phinda, where it is almost equally acknowledged by C1 and C2 (C1 addressed bursaries and schools, while C2 discussed training and environmental education programmes). **Employment** is recognised across the board (by C1 and C2 in every case study) as a positive change, and is the second most mentioned positive change. While it surfaced from C1 in all three cases, Phinda C1 had almost as much to say as C2 for this code. Phinda C1's significantly higher response within the codes of education and employment is noteworthy, showing clear awareness of these positive changes. Under RO 2, 'Knowledge and experience', Phinda C1 already acknowledged Phinda Private Game Reserve as a job creator and supporter of the community. In 'Q2-1 Relationship' under RO 3, Phinda C1 were very positive, recognising a strong relationship, and acknowledging that Phinda is good to them in comparison with other neighbouring reserves. The desire for more employment arose as a meta-theme in RO 3, but since this is different (viewing employment as a benefit and positive change) the meta-theme is denoted as a new theme. Education is also a new meta-theme.

**Facilities and infrastructure** are also mentioned by C1 and C2 in every case study. Here too, C2 conversed more on this, but at Dinokeng, C1 also mentioned it in almost equal proportion to C2. At Phinda, C1 only acknowledged infrastructure related to schools. **Community projects** are mentioned by C2, and only slightly by Phinda's C1. In 'Q2-1 Relationship' this meta-theme of C2 being more aware of the projects than C1, arose. Here the findings highlight again the need for C2 to frequently communicate these projects and their resulting benefits/positive changes to the community.

The quotes under '**Other**' are predominantly from C2 and concern **additional forms of assistance to the community**. At this point, a reserve specific meta-theme emerges because donation of meat for community functions at Mnqobokazi (Phinda) has now been mentioned by C1 under three questions and three research objectives (Research Objective 2, 'Q1 Knowledge'; Research Objective 3, 'Q2-1 Relationship'; and Research Objective 4, 'Q3-2 Positive Changes'). This seemingly small gesture on the part of the reserve does much to enhance a positive image in the eyes of the community, and unlike some of the other actions taken by Phinda's C2, this one seems to be widely known in the community. This demonstrates that communicating actions, programmes and initiatives that benefit the community is essential, and well worth the time and effort it will take.

Though only emerging under Phinda, the following two are worthy of mention: firstly, Phinda following a new philosophy has positively benefited the community as well as influenced other reserves to do likewise (i.e. setting an example for other reserves); and secondly, when communities recognise benefits, this in itself is a positive change.

The importance of **access to natural resources** at Mkhambathi again reveals itself here. Regarding **collaboration/contact**, the same pattern revealed in 'Q2-1 Relationship' and 'Q5 Others' views' occurs again: Dinokeng did not mention it as a positive change, possibly because they feel they are not getting this (and several quotes have revealed their desire for it); and at Phinda, it is only C2 who mentioned it (while it could be argued that out of all the case studies, this is the one where C2 are doing the most information dissemination and interaction). As reflected upon under RO 2, is this because C1 at Phinda are accustomed to receiving regular communication/collaboration and therefore do not note it as a positive change because, for the last decade or so, they have not experienced **not** having it? As far as Dinokeng C1 are concerned, their silence (no quotes) on collaboration/contact as a positive change, confirms the findings from previous questions which revealed a community who feel excluded, clearly desiring to be more informed and more involved.

While frequencies for the remaining codes depicted in Figure 7.6 get lower, it is still worth noting that **personal enjoyment of the reserve** is a positive change mentioned by C1 across all three reserves. Regarding the **successful land claim** at Phinda, it is interesting that this is expressed more by C1. It is encouraging that C1 at Mkhambathi and Phinda communicated the **conservation of the environment** as a positive change, but the frequencies are too low to strengthen it as a meta-theme for now (it became a meta-theme under RO 3). **Inter-cultural contact** is also a positive change revealed by C1 at Dinokeng and Phinda. It is unsurprising that it is not mentioned at Mkhambathi, as locals have no contact with tourists at present.

Finally, C2 at Dinokeng spoke about the challenges of staff retention and employing locals, with initiatives being put in place to improve the latter; and C2 at Phinda voiced that a growing community reduces positive perceptions of the reserve.

#### *7.4.1.2 Benefits*

This analysis and interpretation first considers the top benefits identified in order to get a sense of what C1 and C2 perceive to be the most important benefits. Inadequate knowledge regarding benefits and losses is one of the research gaps identified at the start of this study. Being able to rank benefits and losses to determine which matter most to the community would elevate this knowledge. Apart from the quantitative work of De los Angeles Somarriba-Chang and Gunnarsdotter (2012), the researcher could not find evidence of this being done previously. Table 7.1 presents the **top three benefits firstly as ranked by C1 and C2, in the words used by participants; and then as per the detailed coding frame**,

Table 7.1: Benefits in descending order of importance

| | | Benefit ranking by C1 and C2 in their own words (Tables 4.17, 5.17, 6.17) | | | Order of benefits as per codes in coding frame (Tables 4.18, 5.18, 6.18) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 |
| **Dinokeng** | **C1** | Employment opportunities | Tourism | Sponsorships | Employment | Learning/training: About animals | |
| | | | Knowledge of animals | Saving money due to proximity to work | | | |
| | **C2** | Proximity to work | | | Learning/training: About environment | | |
| | | | | | Employment | | |
| **Mkhambathi** | **C1** | Visiting beach | Grass cutting | Job opportunities | Access to natural resources: Thatch | Employment | |
| | | | | | Visiting reserve: Beach | | |
| | **C2** | Training and development | Job opportunities | Grass cutting | Employment | Access to natural resources: Thatch | Access to natural resources: Other |
| | | Grass cutting | Piece jobs | Visiting beach | | | Learning/training: About environment |
| | | Grass cutting | | | | | |
| | | Fishing | | | | | |
| **Phinda** | **C1** | Jobs | Bursaries/education | Reserve tour | Support for schools and higher education | Employment | Learning/training: About environment |
| | | Skills and programmes | Schools | | | | Learning/training: New skills |
| | **C2** | Education | Primary health care | SMME development | Sponsorships for community facilities | Support for schools and higher education | Employment |
| | | Employment | Education | Rentals from Phinda leasing land | | | Learning/training: About environment |
| | | Employment | Healthcare | | | | Recipient of land claim |
| | | Exposure to outside world | Rentals from Phinda leasing land | | | | |
| | | | School environmental education programme | | | | |

**Note:** For C2, each interviewee was asked to rank benefits, hence, there may be several benefits holding first place, second place, etc. For example, at Phinda, two interviewees put employment in first place, so it is mentioned twice. Another two interviewees put education and exposure to outside world respectively, in first place.

which was inductively developed as coding progressed. Benefits are colour coded to aid analysis, to better observe the recurrence of particular benefits.

**Employment** (peach) clearly surfaced as the most mentioned benefit overall. This is also evident in Figure 7.7 where there are 42 mentions of employment. For C1 and C2, this benefit repeatedly features in the top three (either in the ranking or as per the finer coding). The only exception to this is Mkhambathi C1 who clearly placed visiting the beach and access to thatch grass above employment. Learning and training (blue) is also a prominent benefit. In terms of the type of learning or training, it is either **learning about the environment/animals or skills training.** The former is the most dominant. With the exception of Mkhambathi C1, it is mentioned across the board. C1's expression of this as a benefit at Dinokeng and Phinda is a very positive finding because it reveals that local people attribute value to the environment and want to learn about it. Furthermore, this intangible benefit is placed above many other tangibles which one might have expected to rank above it. This is vital for biodiversity conservation in the future. **Access to natural resources** (green) (mainly thatch grass, but other resources are also mentioned) was very important at Mkhambathi but did not emerge from the other case studies. **Education**-related benefits (grey) (which relate to formal schooling and tertiary education) were vital to both constituencies at Phinda, but did not feature in the other cases.

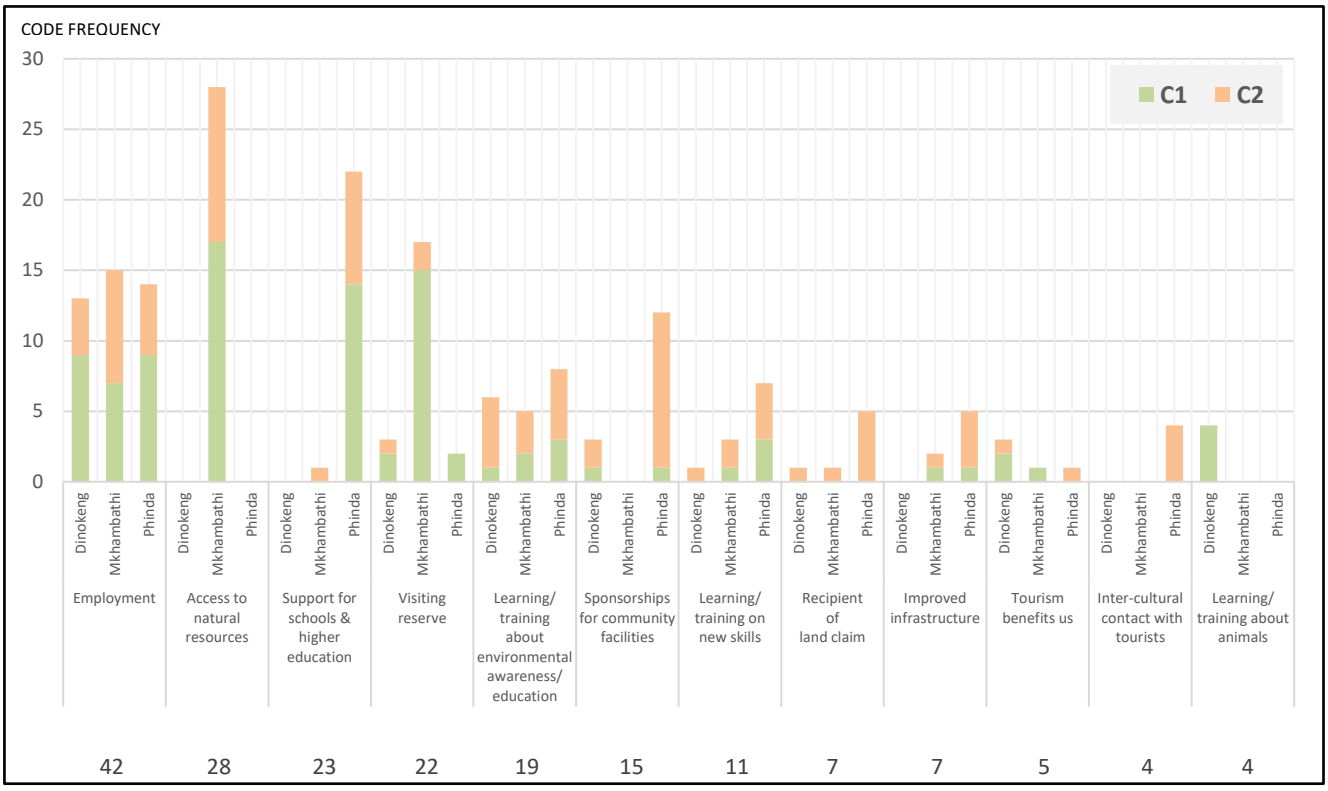



Figure 7.7: Benefits: Dinokeng, Mkhambathi and Phinda

**Visiting the reserve** (light purple) is also a benefit worth noting, appearing in the top three for C1 and C2 at Mkhambathi, and for C1 at Phinda. It is unsurprising that it does not surface for Dinokeng C1, who, in the results of this study, repeatedly requested access to the reserve. When personal enjoyment of reserve

was mentioned by Dinokeng C1 and Mkhambathi C1 in 'Q1 Experience' – that those who had entered, thoroughly enjoyed the experience, and those who felt access was limited, clearly wanted it (Dinokeng C1 under 'Q1 Knowledge') – it became a meta-theme under RO 2. With this arising again from all three of the C1's under positive changes, the importance of visiting the reserve as a meta-theme has been strengthened.

Apart from ranking benefits in each case study and highlighting key benefits as done above, it is not however, possible to rank benefits for the study as a whole, since some benefits are particular to certain reserves. **For C1**, employment appeared across the board. At Dinokeng, learning and training about animals/environment was an important benefit, while at Phinda, C1 mentioned this as well as learning/training for new skills. This is due to the programmes at Phinda which train and upskill members of the community. At Phinda, educational benefits also featured strongly for C1. Focusing on education has been a major drive at Phinda for many years. At Mkhambathi, visiting the beach and natural resources were most prominent. Both of these were due to the particular conditions at Mkhambathi where the community come in their hundreds to visit the beach on New Year's Day; and there is a longstanding arrangement that allows locals to harvest thatch grass during harvesting seasoning.

**For C2**, employment and learning/training about the environment are benefits common to all. Particular to Mkhambathi was access to natural resources (but C2 did not mention visiting the beach, which was so important to C1). Unique to Phinda were education-related benefits, the successful land claim and healthcare (although the clinic in Mnqobokazi was built by government, which explains why C1 do not mention it in the context of a benefit from the reserve).

Figure 7.7 considers all the benefits mentioned four times or more across all three cases, and according to the detailed coding frame developed. Most of the patterns have been discussed above, such as: employment being the most mentioned across the board for C1 and C2; the dominance of visiting the reserve and access to natural resources as benefits at Mkhambathi; and the prevalence of educational benefits at Phinda. Learning/training about the environment should be considered together with learning/training about animals to gain a holistic view of the importance of learning and training at Dinokeng. Visiting the reserve as a tourist seems to be a positivity builder, and should therefore be explored at Dinokeng and Phinda, where these visits are more limited.

While Phinda is the most established reserve in terms of benefits flowing to the community, it is surprising that Phinda is the only case study where C1 had fewer comments regarding benefits than C2 (Figure 7.5). At Dinokeng and Mkhambathi, C1 have 10 and 17 (respectively) more comments regarding benefits than C2. This could be due to the high expectations of the Mnqobokazi community. On the positive side, this finding is encouraging for reserves with fewer resources – in spite of challenges, benefits were noticed, appreciated and expressed more than reserve staff expressed them (i.e. C1 'saw' the benefits more than

C2). It is also interesting to note what C1 did not 'see'. At Phinda, C1 did not 'see' sponsorships for community facilities, the land claim, and benefits from tourism. This again highlights aspects which C2 need to communicate to C1. While Dinokeng C1 were aware of benefits from tourism, the stark absence of this at Mkhambathi highlights the urgency to develop tourism at this reserve.

#### *7.4.1.3 Tangible and intangible positive changes and benefits*

Considering that some of the literature in Chapter 2 differentiates between tangible and intangible benefits, it is worth glancing at the patterns revealed in positive changes and benefits in this regard. It is interesting that Dinokeng C1, who appeared to have little emphasis on traditional tangible benefits, noticed the intangible **positive changes** more (enjoyment of reserve, inter-cultural contact, exposure and increased pride). While these were at low frequencies, when taken cumulatively, this presents a trend. It is strengthened by Dinokeng C1's top dream (discussed in Section 7.6 and depicted in Figure 7.12) being an intangible, namely interaction with the reserve. Dinokeng C2, however, voiced more tangible positive changes (such as education, training and employment) and also had as their top dream (Section 7.6), the tangible of 'Community projects and financial aid'. However, when noting **benefits**, Dinokeng C1 and C2 provided a mix of tangible and intangible benefits, being slightly stronger on the tangibles.

Mkhambathi C1 revealed a mix of tangible and intangible **positive changes** (employment, facilities and infrastructure, collaboration and enjoyment of reserve); as did C2 (natural resources, employment, community projects, etc.). For C1 and C2, the top **benefits** were again a mix of tangibles and intangibles. C1's top dream (Section 7.6) was clearly tangible, namely more development and employment.

Phinda C1 (and C2 for that matter) predominantly recognised tangible **positive changes** (such as education, training and community projects) and also leaned very strongly towards the tangible **benefits**. Under 'More positive' (Figure 7.11), C2 suggested some intangibles for the future. For both constituencies, the top dream (Figure 7.12) is the tangible of employment (RO 6).

In summary, Dinokeng and Mkhambathi suggested a mix of tangibles and intangibles, with Dinokeng C1 veering more towards intangibles. Phinda sits strongly in the tangible camp, and would do well to incorporate more intangibles in future.

### 7.4.2 Meta-themes for positive changes and benefits (Research Objective 4)

MT 1. C2 seem to be more aware of positive changes than C1. At each reserve there are community projects, education/training initiatives and facilities and infrastructure that C1 are not voicing (*RO 3).

MT 2. C1 are slightly more aware of benefits than C2.

MT 3. Community leaders are more aware of positive changes than the wider community. Under RO 2, community leaders also knew more about the reserve. This strengthens the theme that information should be disseminated to all (*RO 2) (*RO 3).

MT 4. Employment is viewed across the board as a positive change, but recognised more by C2. It is also viewed as a benefit across the board, but is noted more by C1 in this case. It is by far the most mentioned benefit.

MT 5. Education/training initiatives are viewed by C2 at all three reserves as a positive change, although at Phinda, C1 also acknowledge this.

MT 6. Under positive changes, the importance of education/training is clearly apparent (except for Mkhambathi C1), and this includes environmental education. Environmental awareness/education is also mentioned by each constituency for all three cases as a benefit (*RO 2).

MT 7. All acknowledge facilities and infrastructure as a positive change. However, this acknowledgement is low at Mkhambathi where there has been little development; and for Phinda, C1 only mention school-related infrastructure.

MT 8. For Mkhambathi, resource access is a very important positive change and benefit.

MT 9. At Phinda, education-related benefits are immensely important to C1 and C2 (noted under benefits and positive changes).

MT 10. Visiting the reserve is a powerful experience and is noted as a valued benefit and positive change. Personal enjoyment of reserve emerged as a meta-theme in RO 2 (*RO 2).

MT 11. Sometimes C2 and C1 have differing perspectives on which benefits matter most.

MT 12. In the reserves with fewer benefits, C1 noted more benefits than C2; whereas it was the other way around in the reserve with the most benefits. It is encouraging that, even in the midst of challenges and major budgetary constraints, the communities still see the benefits they are getting. For reserves with significant benefits, this finding could be highlighting the problem of high expectations. This finding is supported by that fact that, for Phinda, it emerged under RO 2, RO 3 and this present question that C1 do not complain about lack of information and interaction, neither do they comment on it as a positive change (under 'Collaboration/contact'). Yet they are arguably getting far more information from, and interaction with, the reserve compared to the other cases. Is this because they are used to it? Hence, this finding now becomes a meta-theme.

MT 13. At Phinda, donation of meat for community functions is appreciated and enhances a positive image in the eyes of the community.

MT 14. Noticeable by its absence in positive changes (except for inter-cultural contact) and its minor featuring under benefits, tourism as a provider of benefits is not apparent. At some reserves, this can be owing to the fact that there is very little tourism (such as Mkhambathi). However, it is a surprising result for Phinda, where high-end tourism does trickle down and benefit the community. Either communities are not realising the link between tourism and benefits (if so, communication regarding this is vital); or benefits that could accrue from tourism are not reaching them (for example, inter-cultural contact, sponsorships, village tours, etc.).

MT 15. Depending on the specifics of the relationship between the community and the reserve, tangible or intangible or a mix of **positive changes** may prevail (at Dinokeng it is intangibles, at Mkhambathi it is a mix, at Phinda it is tangibles). For **benefits**, Mkhambathi and Dinokeng have a

mix of tangible and intangible, with Dinokeng leaning slightly more towards the tangibles. Phinda leans heavily towards tangible benefits.

MT 16. Phinda results for three questions indicate that when a community is benefiting sufficiently from a protected area, they are aware of it and appreciative. A similar finding emerged under RO 2 (*RO 2).

### 7.4.3 Literature comparison for positive changes and benefits (Research Objective 4)

MT 3 highlights the importance of information being disseminated to all. Bennett *et al*. (2019) highlight awareness campaigns that focus on linking benefits to the existence of the park, because this can improve positive perceptions, which they link to greater support of the protected area. In RO 3 (Section 7.3.2), employment was mentioned as something that C1 wanted more of, and that employment of non-locals caused negativity. Here, MT 4 recognises employment as a significant benefit, which is consistent with many studies, such as Collins (2016); De los Angeles Somarriba-Chang and Gunnarsdotter (2012); Lee (2013); and Stoll-Kleemann (2005). Some authors link direct economic benefits to communities being more active in biodiversity conservation (Imran *et al.*, 2014; Kiss, 2004; Masud *et al*., 2017). However, linking to MT 15, other authors caution against dependence on economic benefits as these could be interrupted or discontinued (Gadd, 2005). Moreover, economic benefits may encourage conservation for the wrong reasons, leading to failure of pro-conservation behaviour should benefits be disrupted (Fennell, 2008). While this study did not directly connect economic incentives alone to pro-conservation behaviour, it was clear that where locals were employed, C1 had very positive attitudes towards the protected area. MT 15 (having a mix of tangible and intangible benefits) stemmed from the varying combinations at the three reserves (with Phinda leaning more heavily on tangibles than the other two reserves). Combining economic and non-economic benefits is vital, as it increases the chances of sustaining pro-conservation behaviour, and its importance is confirmed by Burgoyne and Mearns (2017) and Gadd (2005).

MT 5 and MT 9 refer to education in general. Most of the sources in Chapter 2 refer to education relating to the **environment** as a benefit that changes attitudes and/or behaviour (Imran *et al.*, 2014; Owens & Driffill, 2008; Stem *et al.*, 2003; Tran & Walter, 2014) or that helps locals accept resource restrictions (De Boer & Baquete, 1998). Saufi *et al.* (2014) refer to education on **tourism** as a benefit that increases participation and decreases economic leakage. Only a few mention **general education**, and all are in the African context: Burgoyne and Mearns (2017) list educational infrastructure as a benefit; Snyman (2012b) and Snyman (2014) posit that education is important so that locals link protected areas to benefits; and Swemmer *et al*. (2017) report that it is a benefit that has become mandatory in public/private land lease agreements. Hence, while not strong in existing literature, due to the above-mentioned studies in Africa, and due to the emergence of this meta-theme in the present research, education-related benefits appear to be very important in the African context.

Facilities and infrastructure are mentioned in MT 7, and the importance of this aligns with findings from several authors, such as Lee (2013), Mehta and Heinen (2001) and Stronza and Gordillo (2008). Burgoyne and Mearns (2017) mention development and infrastructure as a means of building trust with the community, while Stem *et al*. (2003) view it a means of buying goodwill.

MT 8 refers to resource access being important to the Khanyayo community outside Mkhambathi. This is confirmed by other studies such as Allendorf *et al*. (2006); Allendorf *et al*. (2018); Berkes (2004); Ghoddousi *et al.* (2018); and Mbaiwa and Stronza (2010). Some researchers advocate that locals should have control over natural resources, as this results in greater support and concern for nature (for example, Licona *et al.,* 2011; Nyaupane & Poudel, 2011; and Waylen *et al*., 2010). This, however, did not emerge in this study, probably due to: the management models at the three reserves, where a conservation agency (at Phinda and Mkhambathi) and landowners (at Dinokeng) manage the resources; the fact that locals live outside the reserves and hence cannot have control over resources; and Phinda and Dinokeng hosting the Big Five, which considerably complicates access.

Also of relevance to MT 8, is that the literature review mentioned that conservation of a resource that could otherwise be destroyed/harmed is also a benefit appreciated by locals (Allendorf *et al.*, 2006; Cobbinah *et al.*, 2015; Mehta & Heinen, 2001). This was indeed the case for Mkhambathi, where participants expressed appreciation for the fact that thatch grass was conserved within the reserve, whereas outside it had been eradicated due to human use of the land.

MT 11 is a key finding in this research, and until the recent research done by Mutanga *et al.* (2015), Mutanga *et al.* (2017) in Zimbabwe and Thondhlana and Cundill (2017) in South Africa, the author had not found other references to C1 and C2 having differing perspectives on which benefits matter most, and the importance of acknowledging this. Perhaps this indicates a new awareness of this gap in African conservation/community research.

MT 13 relates to what the researcher termed 'general community support' as a tangible benefit, which Mutanga *et al.* (2017) and Swemmer *et al.* (2017) also note.

## 7.4.4 Negative changes and losses

### *7.4.4.1 Negative changes*

Figure 7.5 (Cross-question comparison for all case studies: Benefits, Positive Changes, Losses, Negative Changes) indicates that Dinokeng's C1 had more to say about negative changes than C1 at the other two reserves. Figure 7.8 presents the cumulative findings for 'Negative changes'.

**Lack of access to natural resources** is the only code used in all three case studies. For Dinokeng, the high occurrence of quotes from C1 is surprising, as it is contrary to what had previously emerged (that natural resource access is not an issue for Dinokeng C1 as per RO 2 and 'Q8-6 Benefits'). Returning to the original quotes to gain clarity, the reader is reminded that Dinokeng C1 participants' quotes referred to firewood, healing waters and water usage as the resources to which they would like access. Hence, even for Dinokeng, natural resources do matter. This supports the meta-theme identified in RO 3 that lack of access to natural resources causes negativity. Mkhambathi C1 did not mention lack of access to natural resources as a negative change, but it was strongly evident under 'Losses'. C2 at Phinda reflected on natural resource loss, but more as an issue of the past; while Mkhambathi C2 acknowledged that prohibited/limited access to resources is a current issue for C1. From 'Q3-2 Positive changes' and 'Q8-6 Benefits' in Section 7.4.1, the reader is already aware that access to natural resources is an important theme at Mkhambathi.

Although **fear of wild animals** materialised very strongly for Dinokeng C1 under 'Q2-1 Relationship', and to a lesser extent under 'Q5 Others' Views' (both in Section 7.3) and 'Q9-7 Losses' (see Section 7.4.4.2), it did not occur here as a negative change. It could be the phrasing of the question, and the participants' resulting interpretation of what comprises a negative change. Fear of wild animals was, however, apparent for Phinda, with C1 mentioning this more as a negative change than C2. It is also mentioned by Phinda C1 as a loss (Section 7.4.4.2).

Once again (as mentioned in 'Q1 Knowledge' and 'Q2-1 Relationship'), Dinokeng C1 were unhappy with **access to the reserve**. Phinda C1 mentioned **unfair employment policy**, which is corroborated by one C2 response. This featured again under 'Q9-7 Losses' within the code 'Lack of job security' (see Section 7.4.4.2). It should be noted, though, that Phinda C2 struggled to think of negative changes when this question was posed to them.

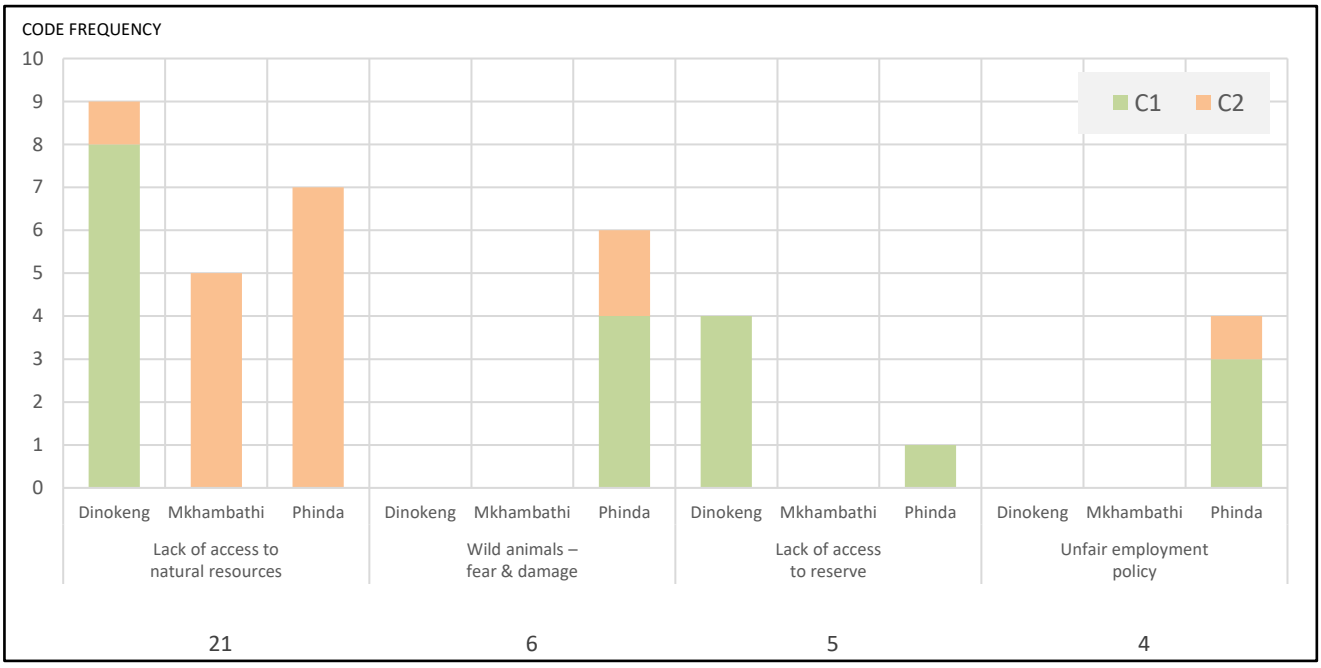



Figure 7.8: Negative changes: Dinokeng, Mkhambathi and Phinda

### *7.4.4.2 Losses*

This analysis and interpretation first considers the top losses identified in order to ascertain the losses that are most important to C1 and C2. Table 7.2 presents the **top three losses firstly as ranked by C1 (C2 were not asked to rank losses) using the category titles that participants allocated; and then as per the detailed coding frame, which was inductively developed by the researcher as coding progressed.** Losses are colour coded to aid analysis. The discussion that follows also considers Figure 7.9 which displays the losses for all three reserves in descending order, starting with the most used code.

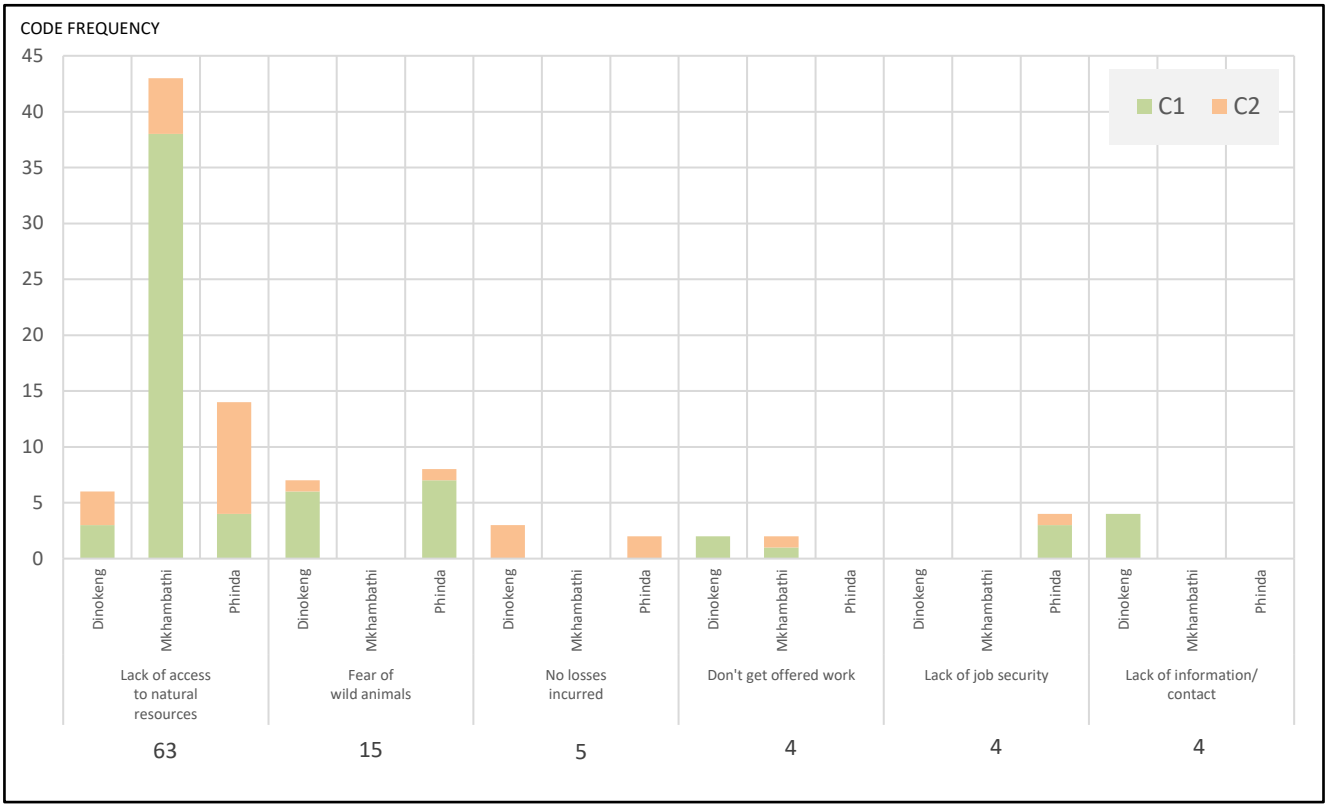



Figure 7.9: Losses: Dinokeng, Mkhambathi and Phinda

**Lack of access to natural resources** (green) is by far the most emergent loss. It was mentioned by C1 in all three case studies; and at Mkhambathi, C2 also refer to it as a loss. At Mkhambathi, it entirely dominated the losses, with C1 being very vocal in stark contrast to C2. In order of importance, the losses mentioned in the Mkhambathi case study are medicinal plants, hunting, fishing and land. For Dinokeng and Phinda, lack of access to natural resources surfaced for C1 in the finer coding done by the researcher (second part of Table 7.2), but not in their ranking (first part of Table 7.2). Therefore, although the issue is present at these two reserves, lack of access to natural resources was not a major issue for them.

As seen in Table 7.2 and Figure 7.9, **fear of wild animals** (pink) was a noticeable loss for Dinokeng and Phinda C1. At Phinda, the concern was particularly for their livestock, which they labelled as 'Trouble for livestock'. While it could be argued that this is not a loss, C1 perceive it that way, most likely because they

have ‘lost’ the previous safety which their livestock had before Phinda became a game reserve with the Big Five. This loss was not mentioned by C2 in either case study. However, it is important for C2 to address this by ensuring secure boundaries, reassuring C1 if boundaries are secure, and empowering C1 to know what to do in the case of an escaped animal. Fear of wild animals was not an issue for the Khanyayo community near Mkhambathi, because the reserve does not contain dangerous animals.

The last few losses worth mentioning, but surfacing in lower frequencies in Figure 7.9, are **insufficient job opportunities** at Dinokeng and Mkhambathi; and at Phinda, **lack of job security** (these are all peach in Table 7.2) which included insufficient opportunities for locals to progress to management level (the latter was also acknowledged by C2).

While **lack of information** at Dinokeng seems minor in Figure 7.9, it is a major issue. In fact, C1 voted it as their top loss (yellow in Table 7.2). Furthermore, for Dinokeng, a reserve-specific meta-theme emerges clearly when one reflects on the questions that have already been analysed. In Research Objective 2, under ‘Q1 Knowledge’, C1 requested information on the reserve and on how to access it; in Research Objective 3, under ‘Q2-1 Relationship’, C1 expressed a need to feel part of the reserve, and desired more collaboration/communication/information and access; in Research Objective 3 under ‘Q5 Others’ Views’, the need for interaction and involvement resurfaced; and in Research Objective 4, ‘Q3-2 Positive changes’, Dinokeng C1 are silent on collaboration/contact as a positive change. Considered cumulatively, this reveals a community who feel marginalised, clearly desiring to be more informed and more involved.

**Visit limitations** (light purple) is another loss for Phinda C1 and was voted as their third most important loss. Visit limitations in this question refer to barriers which make it hard for locals to enter, such as the cost. It emerged previously that Phinda and Dinokeng C1 visit the reserve less as visitors than Mkhambathi C1.

Table 7.2 follows (on the next page), but was introduced at the start of Section 7.4.4.2 as it relates to the discussion above.

### 7.4.5 Meta-themes for negative changes and losses (Research Objective 4)

MT 1. For Dinokeng C1, lack of access to the reserve as visitors is both a negative change and a loss. It has already emerged previously above under ‘Q1 Knowledge’ and ‘Q2-1 Relationship’. It also resurfaced here for Phinda C1 who voted ‘Visit limitations’ as their third most significant loss. For those who feel access is limited, feelings of negativity arise. This has thus earned a place as a meta-theme. Note that the converse of this – namely, that those who have entered as visitors are extremely positive about the experience – emerged as a meta-theme in RO 2.

Table 7.2: Losses in descending order of importance

| | | Loss ranking by C1 in their own words (Tables 4.20, 5.20, 6.20) | | | Order of losses as per codes in coding frame (Tables 4.21, 5.21, 6.21) | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 |
| **Dinokeng** | **C1** | Lack of information on reserve | Lack of employment and empowerment | Fear of wild animals | Fear of wild animals | Lack of information/ contact | Lack of access to natural resources: Can't collect firewood |
| | | | | | | | Insufficient employment, empowerment and donations: Don't get offered work |
| | **C2** | N/A | | | No losses | | |
| **Mkhambathi** | **C1** | Lack of access to medicinal plants | Not allowed to hunt | Not allowed to fish | Lack of access to natural resources: Can't collect medicinal plants | Lack of access to natural resources: Can't hunt | Lack of access to natural resources: Can't access land to farm/loss of land |
| | | | | | | Lack of access to natural resources: Restricted fishing | |
| | **C2** | N/A | | | Lack of access to natural resources: Can't collect medicinal plants | | |
| **Phinda** | **C1** | Trouble for livestock | Job security | Visit limitations | Fear of wild animals | Insufficient employment, empowerment and donations: Lack of job security | Livestock get diseases from wildlife |
| | | | | | | Lack of access to natural resources: Can't access land to farm/loss of land | Visit limitations |
| | **C2** | N/A | | | Lack of access to natural resources: Can't collect medicinal plants | No losses incurred | |
| | | | | | Acknowledge 'Loss of land/can't farm', but feel more benefits flow now | | |

**Note:** * C2 interviewees were only asked to name losses, and did not rank the losses.

* Frequencies are lower in losses than in benefits. If a code was used only once, it is not included in this table.

MT 2. Fear of wild animals is perceived as a significant loss at both reserves which have dangerous animals, and as a negative change at Phinda. In both the losses and negative change questions,

MT 3. C2 barely acknowledge this perception. Fear of wild animals also arose for Dinokeng under 'Others' Views' and 'Relationship', and has featured sufficiently to now become a meta-theme. At Dinokeng this fear results in a direct negative behaviour towards the environment, evidenced in the high number of snakes being killed.

MT 4. Insufficient employment was also mentioned in all three case studies under 'Others' views'. It surfaces again here for Mkhambathi and Dinokeng, and hence can become a meta-theme: The perception of insufficient employment causes negativity and is seen as a loss.

MT 5. At each reserve and in total, C1 acknowledge more losses than C2 do. This perception of losses needs to be acknowledged and addressed by C2.

MT 6. At all three reserves, with very different situations and management structures, **both** constituencies acknowledge more benefits than losses, which is positive.

MT 7. Lack of access to natural resources is seen as a negative change for Dinokeng C1. Under RO 3 it was noted as a meta-theme because Phinda C1 and Mkhambathi C1 noted it, but now it has featured in all three case studies. It is also a very important loss, predominantly emerging from Mkhambathi C1. For Khanyayo, as a rural community, still considerably dependent on the land, loss of access to natural resources is perceived as a significant loss. (*RO 3)

MT 8. Lack of information/interaction for Dinokeng C1 is perceived as both a loss and a negative change, resulting in a sense of exclusion.

MT 9. It can be deduced that historical context appears to influence the expectations of benefits and the identification of losses. (*RO 3)

### 7.4.6 Literature comparison for negative changes and losses (Research Objective 4)

MT 2 regards fear of wild animals as a loss and negative change. Commonly termed 'human-wildlife conflict', this is the most recurrent loss mentioned in literature (Gadd, 2005; Kideghesho *et al.*, 2007; Shibia, 2010; Sommerville *et al.*, 2010). Human-wildlife conflict can result in negative attitudes towards conservation and tourism (Black, 2015; Cobbinah *et al.*, 2015; De Boer & Baquete, 1998, Dewu & Røskaft, 2018; Gadd, 2005; Ghoddousi *et al*., 2018; Infield & Namara, 2001; Mutanga *et al.,* 2017; Nyaupane & Poudel, 2011; Snyman, 2012a); or in behaviour that is detrimental to the environment (Ghoddousi *et al.,* 2018; Namara *et al*., 1998; Stone & Nyaupane, 2018). Well-designed compensation schemes appear to be important in aiming to address these losses (Gadd, 2005; Mutanga *et al.,* 2017; Nyaupane & Poudel, 2011; Pechacek *et al.*, 2013; Snyman, 2012b).

MT 6 has already been compared to literature in Section 7.3.3 (in the context of restrictions on natural resource usage causing negative attitudes) and in Section 7.4.3 (in the context of the importance of natural resource access). Its reappearance in this section indicates that lack of access to natural resources is an important theme. The same authors mentioned in Section 7.3.3, who link restrictions on

resource access to negative attitudes, also contend that this lack of access is likely to affect support for conservation, which in several cases translates to behavioural actions that are detrimental to the environment (Allendorf *et al.*, 2006; Cobbinah *et al*., 2015; Infield & Namara, 2001; Kideghesho *et al*., 2007; Mutanga *et al.*, 2017). Moreover, in recent research relating to South Africa, lack of access to resources is highlighted as a current challenge in co-management arrangements (Bezerra, 2018; Thondhlana *et al.*, 2016).

For MT 7, the need for information has already been discussed under RO 2 and RO 3. However, interaction is now incorporated at this point in the findings. The literature review contains a section on the importance of participation and its value in improving beneficiation, as well as attitudes and behaviour. Participation in a conservation and/or tourism initiative is a form of interaction. MT 7 captures that lack of interaction is seen as a loss at Dinokeng. This is confirmed by Soliku and Schraml (2018) and Zhang *et al.* (2017) who found that lack of participation resulted in negative attitudes. Regarding the importance of interaction, Bertella and Romanelli (2018) and Simpson (2008), in writing about CBTIs, contend that interaction between stakeholders is vital. Regular communication and engagement are required, together with commitment. Recent documentation in the South African context also recognises the importance of interaction, with the 'Norms and Standards for the Management of Protected Areas in South Africa' (linked to the NEMPA Act), calling for regular interaction, collaboration, opportunities for neighbours to provide input, and the entering into co-management agreements where relevant (South Africa, 2016). In addition, the Department of Tourism reiterates that high levels of participation and decision-making are drivers of success in community-based tourism (Spenceley *et al*., 2016). Furthermore, interaction improves people skills and expands the circles of support for communities (Stronza & Gordillo, 2008).

### 7.4.7 Summary to Research Objective 4

In closing this section, it is important to consider the codes and identify the main differences between benefits and positive changes; and losses/costs and negative changes according to the participants in this study. In addition, it is necessary to determine whether the addition of positive and negative changes as questions in this research broadened understanding of what influences pro-conservation attitudes and behaviour.

For **benefits and positive changes**, there were **overlaps** between codes relating to access to natural resources; employment; infrastructure; education; skills/training; revenue sharing; successful land claims; personal enjoyment of reserve; and inter-cultural contact. The latter two are intangibles. All of these, with the exception of revenue sharing, are significant themes materialising in this study. **New codes which emerged under 'Positive changes'** were all intangibles, with the exception of the increase in property price value and community projects. The intangibles were collaboration/contact; the fact that the environment is being conserved; exposure to the outside world; and pride. Out of these,

community projects (for C2), collaboration/contact and conservation of the environment are visible themes in this research. Therefore, asking about positive changes did indeed result in new understanding, particularly of intangibles, but all of these can also be renamed as benefits.

For **losses/costs and negative changes**, there were **overlaps** regarding fear of wild animals; lack of jobs; lack of job security due to unfair employment policies; lack of access to natural resources; and lack of information/contact. All of these occurred strongly in this study, and perhaps that is why these codes overlapped. **New codes which emerged under 'Negative changes'** were frustration from lack of action; being too harsh on poachers; lack of access to the reserve; and deterioration of the reserve. Apart from 'lack of access to the reserve', these are the less strong themes. By asking about negative changes, new insight is gained into the influences on pro-conservation attitudes and behaviour, particularly regarding access to the reserve, which has come forth as an important theme in this study. However, in moving forward, these 'negative changes' can also be labelled as losses or costs.

Hence the conclusion is reached that asking about positive and negative changes was definitely beneficial and added rich insights to the study, particularly regarding intangibles. This highlights the importance of asking a question in different ways in qualitative research.

The re-labelling mentioned above, also applies to the 'Other factors' identified in Chapter 2. These were also mainly intangibles, which other researchers had not classed as benefits or losses/costs. Based on what has been learnt from this study, benefits (sub-divided into tangible and intangible) and losses/costs cover all of these, and hence, in the theory in Chapter 8, there will not be a separate category for 'Other factors'.

RO 4 sought to identify the benefits received and losses incurred by the local community, as well as other factors which could influence attitudes and behaviour towards the protected area. The meta-themes have sifted out the benefits and losses that participants perceived as being truly important, as well as provide pointers that can improve positivity towards the protected area in the future. The interpretation here has also deepened understanding of how communities (C1) view benefits and losses, and how protected area staff (C2) view these, and where adjustments can be made to better align perceptions of the two constituencies in order to positively influence the relationship.

## 7.5 Cross-case analysis for Research Objective 5

**RO 5: To explore the responsibilities of the community towards the protected area and the responses these evoke**

### 7.5.1 Responsibilities

RO 5 is addressed by 'Q7- 5 Responsibility'. Figure 7.10 indicates the cumulative results for this question, which relate to C1 and C2.

Quotes that related to the local community protecting the reserve were the most prevalent in this question. However, the result is interesting: Dinokeng C1 were clear on their sense of responsibility towards the boundary wall (to protect the reserve and for human safety), while this was the only C2 group who expressed that the **community had no responsibility** (second last code in Figure 7.10). In contrast to this view of C2 at Dinokeng, both C2 at Mkhambathi and C2 at Phinda were expressive regarding the **role of the community in protecting the reserve.** Moreover, C1 at these reserves proposed several **ideas to encourage protection** (third code in figure). At Phinda, both C1 and C2 acknowledged that the **community protects the reserve** and have important responsibilities which they take seriously. At Mkhambathi, C2 addressed how previous programs had empowered people, and to this day have evoked protective behavioural actions, even after the tangible benefits had ceased. These findings are important because they indicate that the community wants to play a protective role, even when not expected to do so (as in the case of Dinokeng).

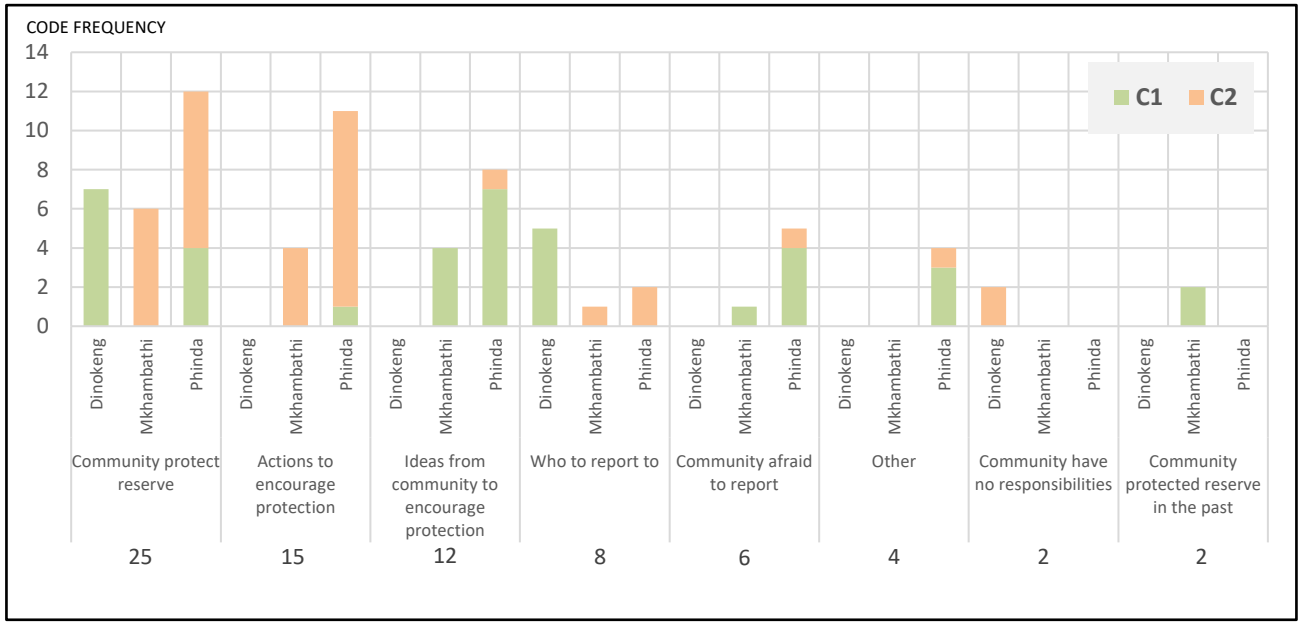



Figure 7.10: Responsibility: Dinokeng, Mkhambathi and Phinda

At Mkhambathi and Phinda, it is expected that C1 play a protective role, which C1 in turn, want to fulfil. In fact, at Mkhambathi, it emerged that some had previously been involved in protective actions (such as reporting fires and chasing poachers), but now felt excluded from being custodians of the reserve, resulting in them developing negative attitudes. C1 at Dinokeng were also uncertain about **whom to report to** should an animal escape (fourth code in figure). In addition, Mkhambathi C1 expressed a clear desire to be involved in care of the reserve, such as clean-up campaigns.

Another positive emanating from this question, particularly under '**Ideas from LC to encourage protection**' is that the natural environment is appreciated, and that some understanding exists of the importance of conservation. This already emerged as a meta-theme in Sections 7.2 and 7.3. Furthermore, in 'Q3-2 Positive Changes', Mkhambathi and Phinda C1 mentioned conservation of the

environment as a positive change. The findings indicate clearly that this meta-theme has been strengthened.

In addition, C1 want to learn about conservation and the environment, so as to understand their role and impact on the reserve. At Mkhambathi and Phinda, there are clear requests for environmental education, with acknowledgement of the programs that have already made a difference. Mkhambathi C1 mention the Schools Competition; and while Phinda C1 did not mention the EEP programme in this question, its value is acknowledged in Chapter 6, with several responses to other questions referring to components of this programme (for example, taking school children into the reserve in game viewing vehicles). At Phinda, some local people have taken it on themselves to teach others about the environment. The value placed on learning about the environment was already revealed as a meta-theme in Section 7.2 (Knowledge and experience) and Section 7.4.1 (Positive changes and benefits). Hence, this theme is now strengthened.

The security of the boundary between reserve and community emerged for Dinokeng in 'Q5 Others' Views' (Section 7.3). It surfaced for Phinda (under 'Ideas from LC to encourage protection'), with C1 warning that, in the context of responsibility, C2 need to ensure the security of the boundary fence (i.e. insinuating 'you play your part and we will play ours'). At Dinokeng, C1 distrusted the boundary wall, which aggravated their fear of wild animals. Considering that this issue has emerged from two reserves, and in two questions, it has become a meta-theme in Section 7.5.2.

The issue of poaching was quite evident in responses to this question. Mkhambathi C2 told how C1 who have been trained in previous programmes, have become the eyes and ears of the reserve, and report suspicious movement/poaching. At Phinda, it is evident that C1 inform, take action, know the reporting structures and have even caught poachers. In Section 7.3 on relationship, C2 asserted that a good relationship, benefits, interaction and education help reduce poaching; while C1 suggested that more employment and a better relationship will reduce poaching. Combining these findings, it is clear that various benefits and a good relationship can decrease poaching. Hence, this now becomes a meta-theme. At Phinda and Mkhambathi, C1 mentioned a fear of reporting poachers. At Phinda there was a reluctance to report minor poaching offences, either out of empathy for poor families who poached due to hunger, or due to bush meat poaching not being perceived as serious. Both C1 and C2 at Phinda acknowledged that anonymous reporting structures would help.

Finally, with the established structures at Phinda, C1 also play a role in protection via the Community Guards, who are partly supported from community trust funds. Under '**Actions taken to protect reserve**' (second code in figure), Phinda C2 note the importance of interaction and involvement with C1. They interact regularly with leaders and involve them in key events (such as rhino dehorning); and with the wider community, they communicate regularly, remind them of benefits and encourage C1 to see themselves as active protectors.

From the preceding analysis, the following meta-themes have emerged.

### 7.5.2 Meta-themes for Research Objective 5

MT 1. Having a responsibility towards the reserve, positively influences attitudes and behaviour towards it. At all three reserves, C1 either play a part in protecting the reserve via actual protective actions (such as reporting poachers, escaped animals or fires); or really desire to play a part. They are positive about this responsibility, and negative if they feel excluded from it, or do not have the correct information on hand to play the role of custodian.

MT 2. If C1 do not trust the boundary between themselves and the reserve, it increases their fear of wild animals and appears to negatively affect their sense of responsibility towards helping to protect the reserve.

MT 3. A good relationship and various benefits can decrease poaching. (*RO 3)

MT 4. There is a real fear of reporting serious poachers.

MT 5. C1 show appreciation of the natural environment and some understanding of the importance of conservation. (*RO 2, *RO 3)

MT 6. C1 want to learn about conservation and the environment, so as to understand their role and impact on the reserve. (*RO 2, *RO 4 Positive changes and Benefits)

MT 7. Reluctance to report minor poaching offences surfaces again here. (*RO 3)

### 7.5.3 Literature comparison for Research Objective 5

MT 1 regards the participants' sincere desire to be custodians of the protected area. Moreover, having a sense of responsibility towards the reserve positively impacts on attitudes and behaviour. This finding does not emerge clearly in literature, yet it is very significant. Communities wish to play a voluntary role in protecting the reserve (i.e. aiding conservation), which in turn increases positive attitudes towards the reserve and influences positive behavioural actions. The responsibility of locals in park management is mentioned by Nsabimana and Spencer (2013) and Rodríguez-Izquierdo *et al.* (2010), but this is different to a sense of having a role to play in conservation. In the literature reviewed, only Spenceley *et al.* (2016:12) refer to "a strong sense of ownership and custodianship within the community" as a driver of success within CBT, which enhances the protection of tourism resources.

MT 3 highlights that a good relationship and various benefits can decrease poaching. Relationship as a key to decrease poaching was a meta-theme (with its associated literature comparison) in Section 7.3. However, the provision of benefits as a further way to decrease poaching, also emerged in this research. This aligns with Stone and Nyaupane (2018) who determined that the provision of benefits led to lower rates of poaching.

Learning about the environment initially materialised as a meta-theme in Section 7.2, and was compared to literature at that point. However, a new addition to this finding is revealed under Research Objective 5, namely that local people want to learn about the environment so that they can understand their role and impact on conservation. A very similar finding emanated from research with rural communities living within a Mexican biosphere reserve (Hill *et al*., 2015). The Mexican participants requested better communication with the conservation agency via the medium of environmental education, so that they could care better for the environment.

In conclusion, RO 5 set out to to explore the responsibilities of the community towards the protected area and the responses these evoke. The results from the three case studies indicate that a range of responsibilities exist such as protecting the boundary; reporting escaped animals, fire and poachers; and contributing towards community guards. In terms of the responses these evoke, results show that the community see the value of conservation and are clearly positive about their responsibility. In fact, they are negative if they feel excluded from being custodians, or are not provided with appropriate information to be able to protect the reserve. In Table 3.1 in Chapter 3 (which highlights the rationale for each question asked to participants), it is mentioned that few authors highlight responsibility as an influence on pro-conservation attitudes and behaviour. These results, however, are clear – having a responsibility is desired by C1 and positively influences attitudes and actual behavioural responses.

## 7.6 Cross-case analysis for Research Objective 6

**RO 6: To discover what could be done differently in future in order to improve the positivity of the local community towards the protected area, and to improve future relationships**

### 7.6.1 Improving positivity

To interrogate this research objective, 'Q4-3 More positive' and 'Q14-10 Dreams' were asked to both C1 and C2 participants at the three case study sites. Figures 7.11 and 7.12 set out the data for the two questions respectively. These will be discussed in conjunction with each other, as several themes overlap between the two questions. The idea is to draw from both to discover what could be done differently in future. To assist the reader in following the analysis, the abbreviations of MP (for 'More positive') and D (for 'Dreams') are used. The analysis considers the figures in conjunction with the summaries in Figures 4.13, 5.13 and 6.13 at the end of Chapters 4, 5 and 6 respectively.

**Education and information**

Under 'More positive', there are 25 quotes regarding information/education. Under 'Dreams', there are three related, but more specific codes: 'Conservation/tourism ethos spread into local community'; 'Environmental education'; and 'General education to uplift community'. Between these three, there are 14 quotes. As per the pattern observed in this chapter, C1 at Dinokeng requested information as

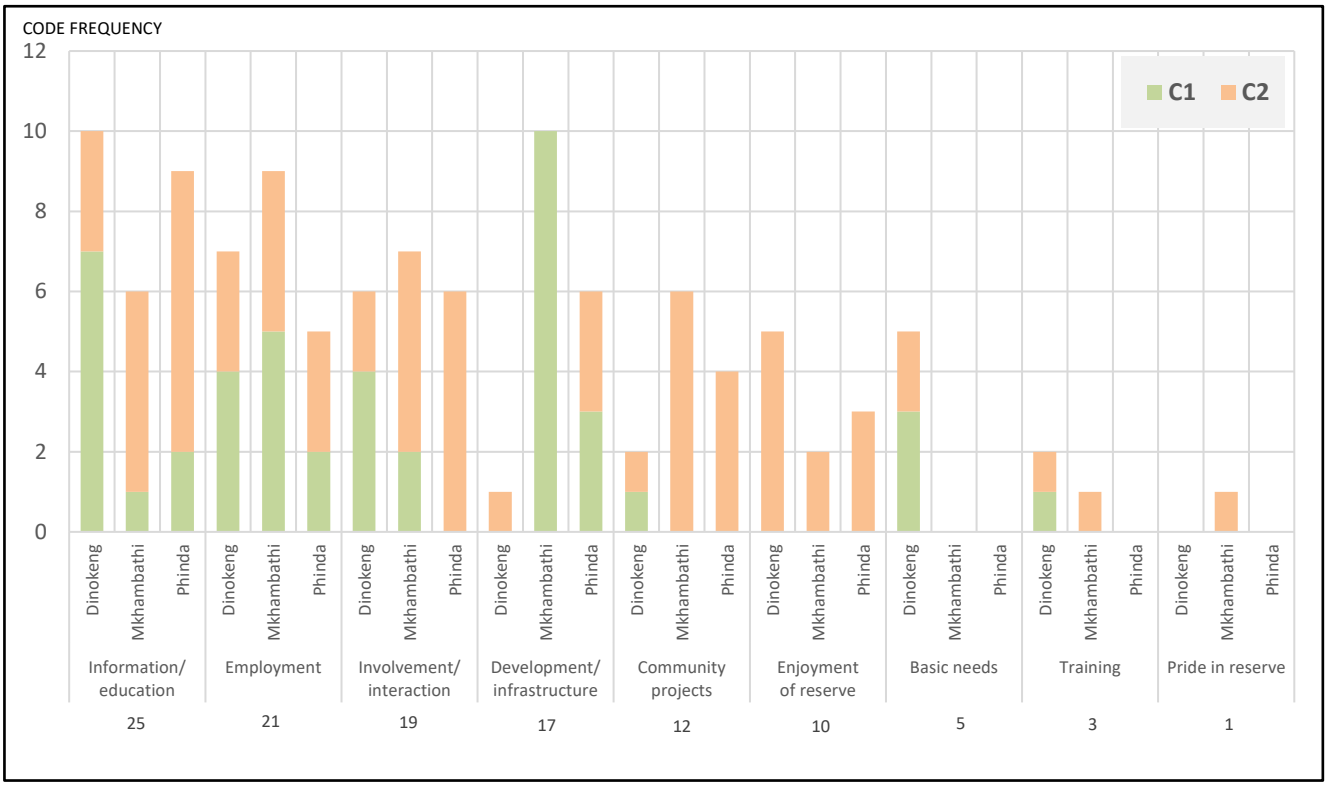



Figure 7.11: More Positive: Dinokeng, Mkhambathi and Phinda

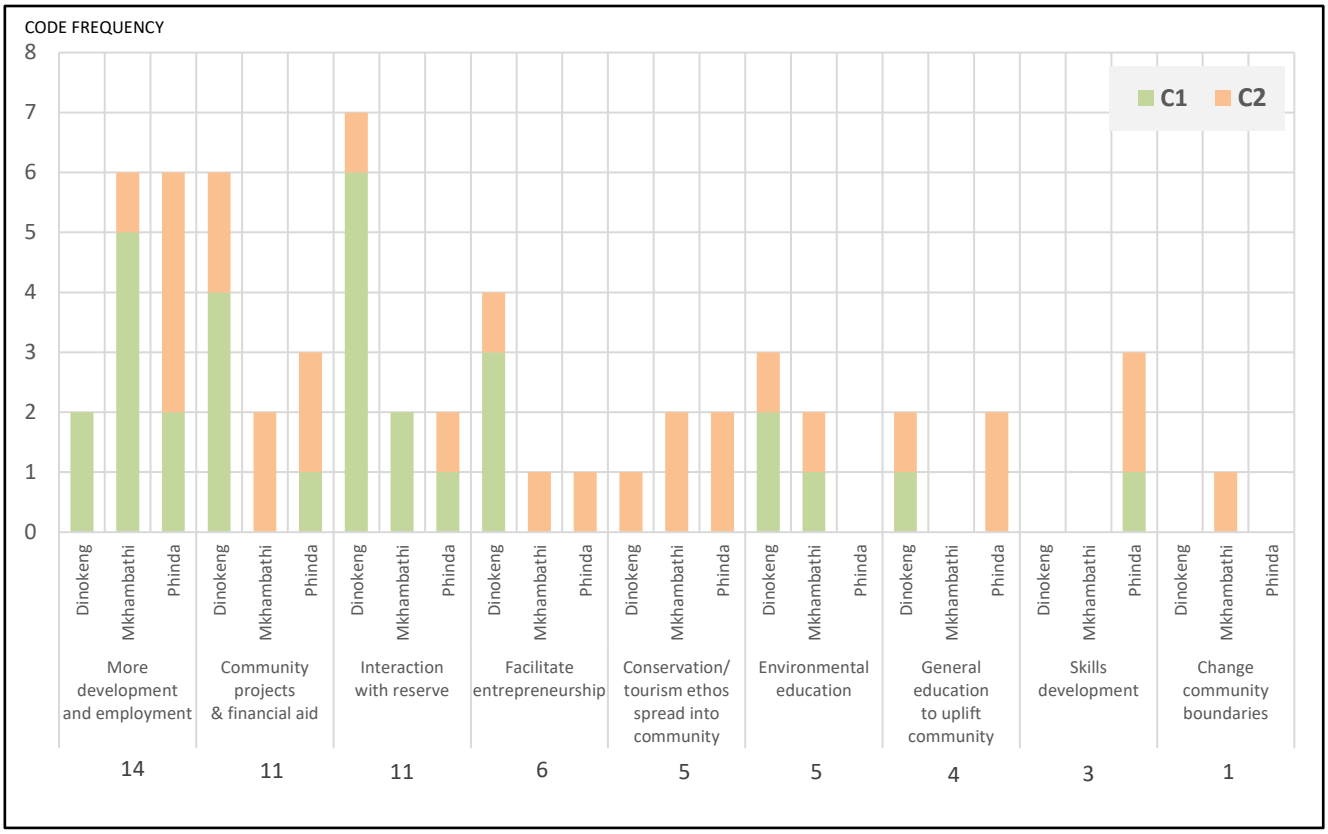



Figure 7.12: Dreams: Dinokeng, Mkhambathi and Phinda

well as education in general (MP). Although at low frequencies, under Dreams, C1 Dinokeng also mentioned environmental education (children having access to the reserve and learning); while for C1 at Mkhambathi, the desire for environmental education for themselves and tourists surfaced. Phinda C1 and C2 mentioned infrastructure as a dream for the future (D), and this was particularly education-

related infrastructure. C2 at all three reserves dreamed of a conservation ethos pervading the community (D) and acknowledged that information and education are key to improving positivity (MP). Considered cumulatively, it is clear that information and education are perceived as factors that improve positivity. However, the education-related codes under 'Dreams' are too inconclusive to draw conclusions. The importance of information is a recurring finding in this study, and came forward as a meta-theme under RO 3 and is now further strengthened.

**Employment**

Employment and development were coded together under 'Dreams' because several participants mentioned them together or linked them (for example, more development will increase employment). However, in this final analysis, the researcher will attempt to pry them apart. In the 14 quotes under this combined code, there were three C1 references and two C2 references to wanting more employment. These related to the need for more jobs, and references to more employment in management positions (D). Turning to the summaries at the end of Chapters 4, 5 and 6 for further detail, employment as a means to increase positivity was mentioned at Dinokeng by C1 (as well as dissatisfaction that locals are employed), and at Mkhambathi and Phinda by C1 and C2 (MP). Employment was a top dream for Mkhambathi C1 and Phinda C1 and C2 (D). Considering the position of employment in both the above graphs and its presence in the summaries, it can be concluded that this is certainly a benefit that improves positivity towards the reserve. It previously emerged as a meta-theme in RO 4 (Positive changes and benefits), and is now strengthened at this point.

In addition, but specific to Phinda, lack of opportunity for locals to progress to management positions was mentioned under Research Objective 3 ('Q5 Others' views') by C1, and under Research Objective 4, ('Q9-7 Losses') by C1 and C2. Moreover, the desire to obtain management positions materialised under this research objective ('Q14-10 Dreams'). Furthermore, lack of job security and unfair employment policies emerged for Phinda under negative changes and losses (Research Objective 4). This earns it a place as a reserve-specific meta-theme.

**Development/infrastructure**

Out of the 14 quotes under the combined 'Dream' code of 'More development and employment', there were ten references to wanting more development (C1:6; C2:4). These ranged from development within the community (for example, running water, shops and cultural villages) to development within the reserve (for example, better accommodation, more animals and more reserve land). Within these ten quotes, there was a fairly even spread between these two forms of development, meaning that the communities grasped the positive spin-offs for them personally of the reserve being better developed. While development is strongly evident under 'Dreams', it is also in the top four under 'More positive'. Under 'Dreams' and 'More positive', it surfaced more from C1, particularly Mkhambathi, which is not surprising considering the low development of that reserve. Together with employment, development was a top dream for the future for Mkhambathi C1 (D). Participants recognised development and

infrastructure as vital for both them and tourists, and as something that would increase employment (MP). Interestingly, C2 at Mkhambathi did not name development and infrastructure as something that would increase positivity. Infrastructure as a positive change featured as a meta-theme under RO 4 (Positive changes and benefits) and is now stronger.

**Involvement/interaction**

Considering both Figures 7.11 and 7.12, 'Involvement/interaction' (MP) and 'Interaction with reserve' (D) are the next most prominent groupings. Once again, this arose fairly strongly for Dinokeng C1. From the summaries, it is evident that Dinokeng C1 sought involvement/interaction because they want to know and understand the importance of the reserve, and that this will increase their sense of involvement (MP). They also mentioned again, under 'Interaction' (D), that they would like information on what to do should an animal escape. C2 at Dinokeng indicated awareness of the importance of involvement/interaction, but perhaps not of how earnestly C1 sought this. Moreover, it also emerged that C1 at Dinokeng have a sense of ownership and want to feel ownership over the reserve (MP). This is supported by the fact that C1 Dinokeng's top dream for the future was close interaction with the reserve (D).

At Mkhambathi, C2 said more about this as a factor that would increase positivity (MP). However, both C1 and C2 highlighted the need for interaction with and transparency of the board of the Mkhambathi Land Trust, that constitutes community members (MP). In terms of C1's dreams for an ideal future, the summary for this question for Mkhambathi C1 illustrated that communication and interaction with the reserve is essential and desired by C1, and that this results in good relationships (D).

For Phinda, C2 perceived this as an important factor in increasing positivity (MP). They viewed involvement/interaction, information and education as key to understanding the importance of conservation and to linking wildlife/tourism to benefits received (MP). In addition, Phinda C2 acknowledged the following positivity builders: targeting new people moving into area; continue entering the community and interacting with them; highlighting benefits; and involving leadership (MP). Once again, C1 at Phinda did not mention interaction or involvement in either of these two questions. The one quote under 'Dreams' ('Interaction with reserve') from Phinda C1, expressed the wish for locals to own shares in the reserve.

From the above, it is clear that involvement/interaction is important in encouraging community positivity towards the reserve. Only Phinda C1 did not mention this, a finding that has already been mentioned in this study. While this suggestion to involve/interact more with the community as a means to increase positivity (MP) did emanate more from C2 (with the exception of Dinokeng), the reader is reminded that C2 participants all worked closely with the community, and hence are credible sources to pass opinions on what they believe will increase positivity. However, the dreams concerning interaction with the reserve came more from C1, particularly Dinokeng. Considered cumulatively, involvement and

interaction is clearly something desired by C1. In addition, tucked into the summaries were some nuggets of value which cast light on the influence of involvement/interaction on pro-conservation **attitudes.** Involvement/interaction was linked to: locals knowing and understanding the importance of the reserve/conservation (Dinokeng and Phinda) which increases their sense of involvement (Dinokeng); understanding benefits received (Phinda); a sense of ownership of the reserve (Dinokeng); and a good relationship (Mkhambathi).

**Community projects**

The next theme arising fairly strongly was that of 'Community projects'. This was coded as 'Community projects' and 'Basic needs' under 'More positive'; and as 'Community projects and financial aid' under 'Dreams'. Figure 7.11 indicates that viewing community projects as an aspect requiring attention in the future as a means to increase positivity, was more prevalent for C2 at Mkhambathi and Phinda. Under RO 3 and RO 4, the meta-theme surfaced that C2 were more familiar with the range of community projects on the go, but that some or most of these were seldom, if ever, mentioned by C1. Although this question is in a different context, C2 were still mentioning community projects more than C1 (hence this theme is further strengthened). From the textual summaries, the intentionality of C2 to see C1 uplifted by these social development projects was clear at all three reserves (Dinokeng MP and D; Mkhambathi MP and D; and Phinda D). This reiterates the theme that having the projects is as important as making sure the community knows about the projects and attributes them to the protected area. C1 at Dinokeng had more to say here than the other C1's, and requested support to meet basic needs (MP) and community upliftment assistance (D).

**Skills training**

Three codes related to skills training, namely 'Training' (MP), 'Facilitate entrepreneurship' (D) and 'Skills development' (D). The bar graphs did not show anything conclusive, but from the textual summaries, which took into account quote content, the reader can see that skills and training were referred to at each reserve, in each constituency, except for Mkhambathi C1. C1 at Phinda mentioned skills training and SMME development (MP and D) and at Dinokeng they dreamt of opportunities to sell crafts, which is also SMME development (D). C2 at all three reserves dreamed of facilitating SMME opportunities (D) and made inferences to skills training (Dinokeng D; Mkhambathi MP; and Phinda D). In summary, C2 at all three reserves and Phinda C1 mentioned SMME development and skills training (which can also lead to formal employment); and Dinokeng C1 also referred to SMME development. Hence, one can conclude that skills training and SMME development are important as positivity builders and are dreams which participants would like to see realised.

**Enjoyment of reserve**

Enjoyment of the reserve is shown in Figure 7.11, and interestingly, only by C2 at all three reserves. In other questions, C1 expressed their enjoyment of the reserve ('Q1 Experience', 'Q3-2 Positive changes' and 'Q8-6 Benefits'), or their desire to enter the reserve ('Q1 Knowledge', 'Q2-1 Relationship', 'Q3-2

Negative changes' and 'Q9-7 Losses'). In this question on improving positivity, C2 acknowledged its importance as a factor that can improve the attitude of the community towards the protected area. The power of visiting the reserve became a meta-theme under RO 2 and was strengthened under RO 4. It is strengthened here again. Keep in mind that the converse – the negativity felt when locals perceive that accessing the reserve is difficult – became a meta-theme in RO 4.

**Totals**

Finally, when considering the totals of the data in Figure 7.11 ('More Positive'), C2 generally had more suggestions to increase positivity than C1 (C1:45; C2:68). At Mkhambathi and Phinda, C2's suggestions exceeded C1, particularly at Phinda (C1:7; C2:26). This could indicate the satisfaction of C1 and the intent of C2 to continue improving the relationship.

### 7.6.2 Meta-themes for Research Objective 6

MT 1. General education improves positivity towards the reserve. (*RO 4)

MT 2. Information on the reserve improves positivity towards the reserve. (*RO 3)

MT 3. Employment is important and certainly improves positivity towards the protected area. (*RO 4)

MT 4. At Phinda, lack of opportunity for locals to progress to management positions causes discontent and they desire this for the future. There also appears to be some negativity over what are perceived as unfair employment policies/lack of job security.

MT 5. The desire for development/infrastructure emerges strongly for the least developed reserve, namely Mkhambathi. Frustration from lack of development also emerged for Mkhambathi under 'Q5 Others' views'. It is not a strong factor at the other reserves in the context of improving positivity, but it is present. However, under RO 4 all acknowledged facilities and infrastructure as a positive change, so it became a meta-theme at that point. (*RO 4)

MT 6. Involvement/interaction is clearly desired by C1, is a positivity builder, and helps C1 to understand conservation better and their role in it.

MT 7. At all three reserves there is genuine intent from C2 to see C1 benefit from community projects.

MT 8. Skills training and SMME development are important as positivity builders and are dreams which participants would like to see realised.

MT 9. Dinokeng C1 request information provision. Dinokeng C1's request for information emerged in RO 2 (Knowledge) and RO 3 (Relationship and Others' Views). Under RO 4 (Negative changes and losses), lack of information and interaction was noted as a loss. With its appearance here too, it has become a reserve-specific meta-theme.

MT 10. In RO 3, Dinokeng and Phinda C1 express discontent over the employment of non-locals. It is mentioned again here by Dinokeng C1 under MP. (*RO 3)

MT 11. C2 see community projects more as dreams and positivity builders than C1 do. In RO 3 and RO 4, the theme of C1 not being as aware of community projects as C2 already emerged. (*RO 3 *RO 4)

MT 12. Visiting the reserve is an important positivity builder. (*RO 2 *RO 4)

### 7.6.3 Literature comparison for Research Objective 6

In Mutanga *et al.* (2017), a staff member at Gonarezhou National Park mentioned the issue of locals occupying low positions with low income, pointing out, however, that they are often insufficiently qualified to take on higher positions. This aligns with MT 4 and highlights the need for in-house capacity building/training programmes to grow staff. This was the only relevant reference found in the literature that applies to MT 4. There is plenty on co-management and sharing of management, but this meta-theme is different. Participants are referring to their desire to rise in the ranks within Phinda to managerial positions, and a perception of this being difficult is causing negative attitudes. What literature does indicate though, is that personal growth in management skills is an intangible benefit (Stronza & Gordillo, 2008).

Interaction (MT 6) emerged in RO 4 (Negative changes and losses) in the context of Dinokeng C1 lacking interaction. It appears again under RO 6 as something that C1 would like to have, that builds positive attitudes and even aids communities in understanding conservation and their role in it. Interaction has therefore already been compared to literature under RO 4. The word 'involvement' features in MT 6, which is a term used interchangeably with 'participation'. To supplement the literature comparison under RO 4, there is wide consensus that involvement in natural resource management is important (Torquebiau & Taylor, 2009), with lack of this resulting in conflict (Thondhlana & Cundill, 2017). Involvement in decision-making is also crucial according to Niedziałkowski *et al*. (2018) and Soliku and Schraml (2018), with failure to do so similarly resulting in conflict (Thondhlana *et al.,* 2016). Moreover, Lee (2013) discovered that involvement leads to a better perception of benefits, which positively influences support for sustainable tourism development. Under RO 4 (Positive changes and benefits), the literature is clear regarding the importance of involvement. However, what is unique about this finding under RO 6, is that communities want to be involved not only to benefit, but also to understand conservation and how they can be part of it, and how their actions influence it.

MT 8 revealed that skills training and small business development are important to build positive attitudes. The literature review in Chapter 2 did not include authors who made the link between skills training and positive attitudes, as emerged in this study. However, several authors do note the importance of skills training and capacity building as an intangible benefit (Collins, 2016; Mbaiwa & Stronza, 2010; Saufi *et al.*, 2014; Stem *et al*., 2003; Stronza & Gordillo, 2008).

## 7.7 Chapter 7 summary

Chapter 7 constitutes rich descriptions that make key connections between three contrasting case studies to address five of the research objectives for this study. The process followed to determine the meta-themes reduced the large amount of data from Chapters 4, 5 and 6 into a form where it became meaningful on another level – namely the identification of the most important issues influencing pro-

conservation attitudes and behaviour in the local communities of the three case studies. The use of case studies with differing ownership and management structures, and at different stages in the level of improvement in human wellbeing offered to the adjacent community, significantly enrich the findings. Furthermore, these systematically generated meta-themes form the building blocks to construct the theory in Chapter 8 with confidence; and are the source of the recommendations in Chapter 8.

The cross-case analysis and interpretation considered all the data (Yin, 2009) in order to compare and contrast different components (different questions, different case studies and different constituencies) to increase our understanding (Willig, 2014). Regarding the different constituencies, comparison between C1 and C2 across the cases revealed interesting patterns of differing perceptions. In Chapter 8, these are taken further to determine where and how, through practical actions, these perceptions can be aligned to improve the relationship between the community and the protected area.

Table 7.3 provides a colour-coded summary of all the meta-themes. These are numbered according to the numbers of the meta-themes within the text, and colour-coded according to the content of the meta-theme. This table allows the reader, at a glance, to detect the prevalence of each meta-theme. While several themes run across the three case studies, themes that are specific to one reserve only are denoted by providing the name of the reserve within the relevant block. The smaller table within the legend explains the colour coding system. Each colour, encapsulating several meta-themes is allocated a 'summary title' ('Topic of meta-theme'). Moreover, within this smaller table, the research objectives in which this meta-theme topic emerged are listed, which enables the reader to view its prevalence in another format.

Research Objective 1 was achieved via the literature review in Chapter 2. In this chapter, Research Objectives 2, 3, 4, 5 and 6 were fully achieved. In Chapter 8, Research Objective 7 is achieved, namely the conceptualisation of a theory and recommendations for protected area managers and communities bordering protected areas. It also deals with Research Objective 8 – the development of an integrated framework. Chapter 9 concludes the study.

In closing, the two quotes at the start of Chapter 7 aptly illustrate the crises prevalent in the two focus points of this study, namely protected areas and the communities adjacent to them. The large decline in wildlife populations is alarming. A starving child is alarming, and families in this situation will not have the capacity to consider any harm they may be doing to the environment. Hence, it is vital to find middle ground solutions where community wellbeing and biodiversity conservation can both win. Chapter 7 takes the study one step closer towards this.

Table 7.3: Colour-coded meta-themes

| MT | RO 2 | RO 3 | RO 4 | | RO 5 | RO 6 |
|---|---|---|---|---|---|---|
| | KNOWLEDGE AND EXPERIENCE | RELATIONSHIP | POSITIVE CHANGES & BENEFITS | NEGATIVE CHANGES & LOSSES | RESPONSIBILITY | IMPROVING POSITIVITY |
| 1. | C1 enjoy visiting reserve and want to visit. | C2 more aware than C1 of projects that improve relationship; and more positive regarding relationship. | C2 more aware of positive changes than C1. | Limited access to reserve causes negativity and is perceived as a negative change and loss. | C1 either actively protect reserve or want to play this role. C1 are negative if feel excluded from this. | General education improves positivity towards reserve. |
| 2. | C1 appreciate reserve. Nature and animals are the focus and they want to learn about conservation and nature. | C1 appreciate nature and conservation. | C1 name more benefits than C2. | Fear of wild animals is a significant loss and negative change and affects relationship. | If C1 don't trust safety of reserve boundary, it increases fear of wild animals and negatively affects sense of responsibility. | Information on reserve improves positivity towards reserve. |
| 3. | Information should be spread to all, not just leaders. | A good relationship decreases poaching. | Community leaders more aware of positive changes than wider community. Information should be disseminated to all. | Insufficient employment causes negativity and is seen as a loss. | A good relationship and benefits decrease poaching. | Employment is important and improves positivity towards the reserve. |
| 4. | Those who visited as tourists know more about reserve. | Historical context influences expectation of benefits. | Employment is a positive change and the most mentioned benefit. | C1 perceive more losses than C2 | C1 have real fear of reporting serious poachers. | Phinda: Lack of management positions and perception of unfair employment policies causes negativity. |
| 5. | Phinda: C1 acknowledge acknowledge a successful model and good relationship. | C1 reluctant to report minor poaching. | Education-related benefits are a positive change. | More benefits than losses are acknowledged, which is positive. | C1 appreciate nature and conservation. | Mkhambathi: Where development/infrastructure is less, it emerges strongly as a dream and positivity builder. |
| 6. | Access to natural resources historically, influences attitudes today. | C1 desire information. | Environmental education is important to C1 and C2. | Lack of access to natural resources is a negative change and a loss. | C1 want to learn about conservation and environment so as to understand their role and impact on reserve. | Involvement and interaction is clearly desired by C1, is a positivity builder and helps C1 to understand conservation and their role in it. |
| 7. | | C1 want more employment. | Infrastructure seen as positive change where it has been received. | Dinokeng: C1 view lack of information and interaction as a loss, resulting in a sense of exclusion. | C1 reluctant to report minor poaching. | Genuine intent from C2 to see C1 benefit (goodwill). |
| 8. | | Employing non-locals causes negativity | Mkhambathi: Natural resource access is a very important positive change. | Historical context influences the expectation of benefits and the identification of losses. | | Skills training and SMME development are important positivity builders and dreams for future. |
| 9. | | Lack of access to natural resources causes negativity. | Phinda: Education-related benefits are very important. | | | Dinokeng: C1 request information provision. |
| 10. | | | Visiting reserve is powerful –noted as benefit and positive change. | | | Dinokeng: C1 discontent over employment of non-locals. |
| 11. | | | Sometimes C1 and C2 have differing perspectives on which benefits matter most. | | | C2 see community projects more as dreams and positivity builders than C1 do. |
| 12. | | | • Even with challenges and budget constraints, C1 do see the benefits.<br>• In very successful models, C1 may recognise less specific benefits due to being used to them or having higher expectations. | | | Visiting the reserve is an important positivity builder. |
| 13. | | | Phinda: Donation of meat is appreciated and enhances image of reserve. | | | |
| 14. | | | Either communities are not seeing link between tourism and benefits or tourism-related benefits are not reaching them. | | | |
| 15. | | | Reserves should have a mix of tangible and intangible benefits. | | | |
| 16. | | | Phinda: Where C1 benefit well, they are aware of it and appreciative. | | | |

**LEGEND**

| Colour | Topic of meta-theme | Appears in RO |
|---|---|---|
| | Access to reserve as tourist | 2, 4, 6 |
| | C1 appreciate conservation | 2, 3, 5 |
| | Environmental education | 2, 4, 5, 6 |
| | Information and interaction | 2, 3, 4, 6 |
| | Access to natural resources | 2, 3, 4 |
| | Influence of historical context | 2, 3, 4 |
| | Key differences between C1 and C2 | 3, 4, 6 |
| | Poaching and relationship | 3, 5 |
| | Employment | 3, 4, 6 |
| | Environmental education | 2, 4, 5, 6 |
| | Development/infrastructure | 4, 6 |
| | General education | 4, 6 |
| | Human-wildlife conflict | 4 |
| | Responsibility towards reserve | 5 |
| | White cells indicate the remaining themes which are stand-alone | |

**C1** Constituency 1

**C2** Constituency 2

**MT** Meta-theme

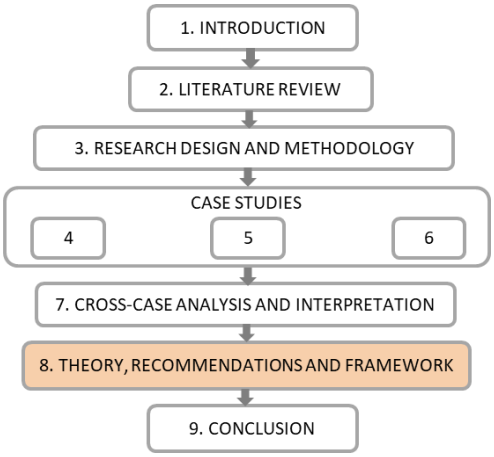
**RO** Research Objective

**Notes:**

- Where these themes appear in Tables 7.1 and 7.2, their colours correspond with those of this table.
- When a meta-theme is reserve-specific, the name of the reserve is included.

# Chapter 8

# Theory, recommendations and framework




*"Conservation initiatives and actions are a perpetual experiment. This trial-and-error view of conservation requires constant attention to successes and failures and subsequent adaptations of policies and actions to improve ecological and social outcomes".*

(Nathan James Bennett, 2016:5)

## 8.1 Introduction

The chapter provides evidence of the achievement of the final two objectives. In Chapter 7, meta-themes were gleaned from the data. The meta-themes are the most important issues which emerged strongly from the cross-case analysis of the three respective case studies (Dinokeng/Kekana Gardens, Mkhambathi/Khanyayo and Phinda/Mnqobokazi). These meta-themes are the building blocks for the data-driven theory constructed in this chapter (Research Objective 7.1) as well as being the source from which the recommendations emanate (Research Objective 7.2). Finally, the study culminates in the production of a comprehensive integrated framework which incorporates the primary research conducted in this study and the secondary research consulted (Research Objective 8).

The achievement of Research Objective 7 constitutes the **third layer of analysis and interpretation** as per the 'Research process' diagram in Figure 1.3, and reduces the data further. Research Objective 8 forms the fourth and **final layer of analysis and interpretation**.

The layout of this chapter is presented in Figure 8.1.

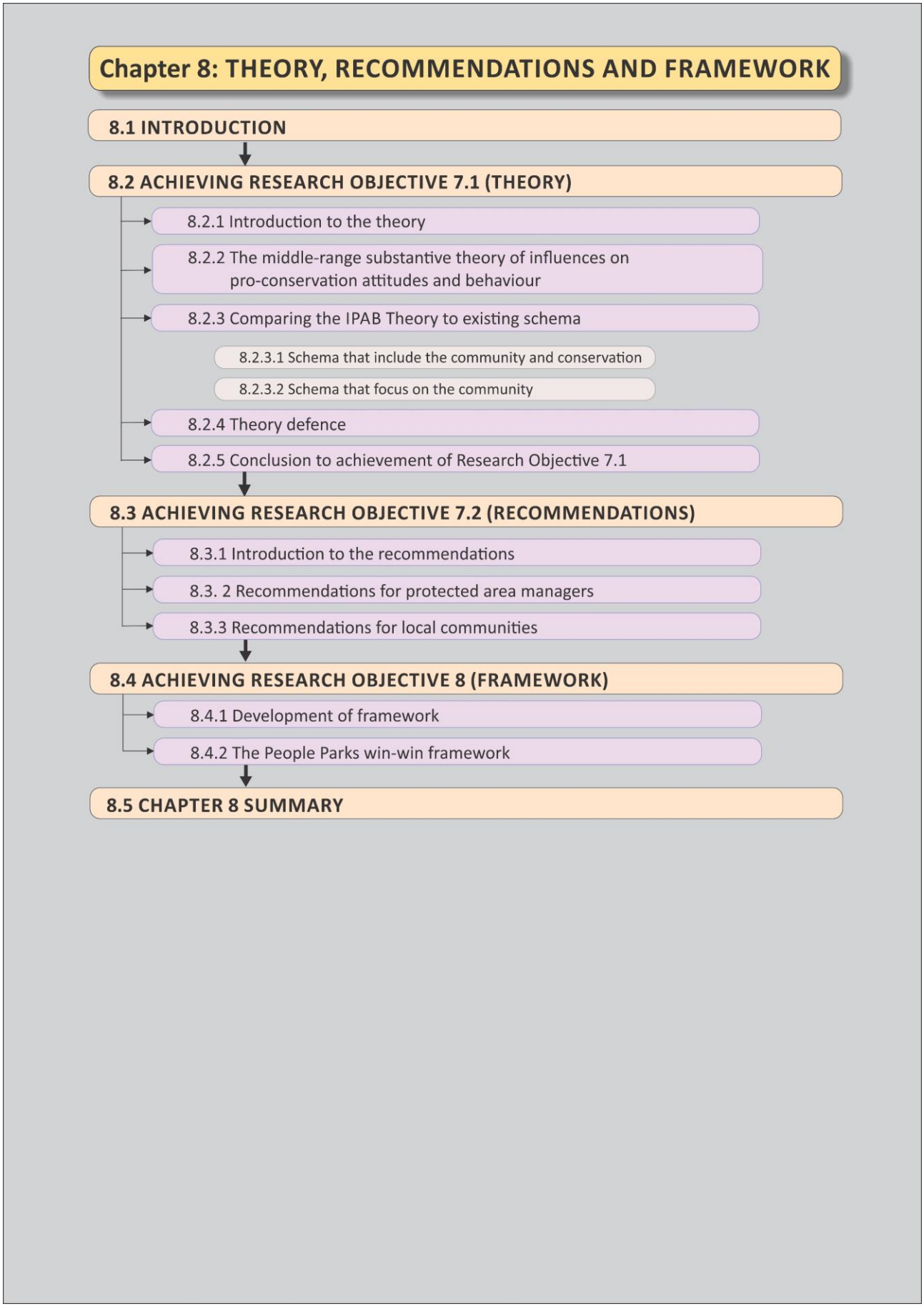



Figure 8.1: Chapter 8 layout

## 8.2 Achieving Research Objective 7.1 (Theory)

**RO 7.1: To construct a middle-range substantive theory that attempts to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions that give rise to pro- or anti-conservation attitudes and behaviours.**

### 8.2.1 Introduction to the theory

The research design of this PhD study involved case studies and a variant of grounded theory, both of which were equally important in executing the study and producing the key contributions. Both a case study design and a grounded theory design aim to develop theory (Darke, Shanks & Broadbent, 1998). Therefore, to consolidate and draw the primary data from this research to a close, the 'Theory of Influences on Pro-conservation Attitudes and Behaviour' is constructed and is introduced below. The resulting middle-range substantive theory is induced entirely from the diverse data gathered in this study, and the thesis clearly lays out the steps followed to arrive at this point. Reflecting on this stage of consolidating data, Coles, Duval and Shaw (2013:179) draw attention to the "take-home messages", Creswell (2014) mentions the lessons learnt, and Remenyi (2015) discusses using what has been learnt to produce a novel way of viewing the situation. Hence in this section, the researcher uses a theory as the means to view the take-home messages/main lessons. Regarding the production of theory, Glaser and Strauss (1967:224, 225) write:

> "When the researcher is convinced that his conceptual framework forms a systematic theory, that is a reasonably accurate statement of the matters studied, that it is couched in a form possible for others to use in studying a similar area, and that he can publish his results with confidence, then he is near the end of his research. He believes not because of an arbitrary judgement but because he has taken very special pains to discover what he thinks he may know, every step of the way from the beginning of his investigation until its publishable conclusion. … By the close of his investigation, the researcher's conviction about his own theory will be hard to shake … This conviction does not mean that his analysis is the only plausible one that could be based on his data, but only that he has high confidence in its credibility. What he has confidence in is not a scattered series of analyses, but a systematic ordering of them into an integrated theory".

In the present study, a very systematic meticulous methodology was followed to produce the meta-themes, which are the building blocks used to construct the theory.

Every element of the theory is derived from the data of this study. Section 3.4.3 explains the methodological choices regarding the production of theory. As indicated, this theory is not a grand theory, but rather a middle-range substantive theory. A grand theory combines sets of phenomena to form a broader abstract overview which can be applied to a range of disciplines (Grbich, 2007). In

contrast, middle-range theories are narrower, explaining a specific set of phenomena within a discipline (Grbich, 2007; Wacker, 1998). Middle-range theories lie between the "minor but necessary working hypotheses that evolve in abundance during day-to-day research, and the all-inclusive systematic efforts to develop a unified theory that will explain all the observed uniformities of social behavior, social organization and social change" (Merton, 1968:39). In addition, the word 'substantive' denotes that the theory has a particular focus and should be understandable to stakeholders working in that particular field (Grbich, 2007).

Theory can be regarded as an organised structure of concepts and the relationships between them that explain a phenomenon (Johnson & Christensen, 2010; Tavallaei & Abu Talib, 2010). They "are not merely summaries, but explanations of data" (Kelle, 2014:561), and hence are often best presented in a diagrammatic/schematic format, providing a visual representation of the different elements and their relationships/connections, that explain the data (Creswell, 2014; Kelle, 2014). A schematic approach was thus chosen to present the theory constructed in this study.

Regarding the generalisability of these findings, this is dealt with in Section 3.7.3. The researcher does not claim generalisability beyond the three case studies which produced the data that led to the theory (Hofstee, 2011). Kelle (2014:562) however, explains that middle-range theories "can often be sensibly transferred to other domains". Hence this middle-range substantive theory could have areas of applicability to other protected areas and surrounding communities, and the researcher encourages users to select what is relevant to them, and to customise this theory based on their own findings. As Glaser and Strauss (1967) state, the reader will make the necessary adjustments and corrections when considering or making use of the theory.

With respect to terminology, the phenomena which form the focus of this study are grouped together and labelled accordingly in Figure 2.1. They were explored in Sections 2.5, 2.6 and 2.7 respectively of the literature review and covered linkages between benefits/losses, pro-conservation attitudes and behaviour; specific benefits and losses; and other factors of influence. The reader is reminded that the literature review was set aside 11 months prior to data collection, its initial purpose being to guide the development of the research gaps, aim, objectives and research instrument. Only after write-up of results, which included the theory construction, did the researcher return to the literature. In the theory, the phenomena all retain a place. However, some have been redistributed and reorganised, with more appropriate headings being given in certain cases as per the findings of this study. This is explained in Section 8.2.2. In the description of the theory, the term 'elements' is used rather than phenomena.

### 8.2.2 The middle-range substantive Theory of Influences on Pro-conservation Attitudes and Behaviour (IPAB)

Figure 8.2 presents the theory developed from this study, namely the middle-range substantive Theory of Influences on Pro-conservation Attitudes and Behaviour (the IPAB Theory). This is followed by an explanation of the theory.

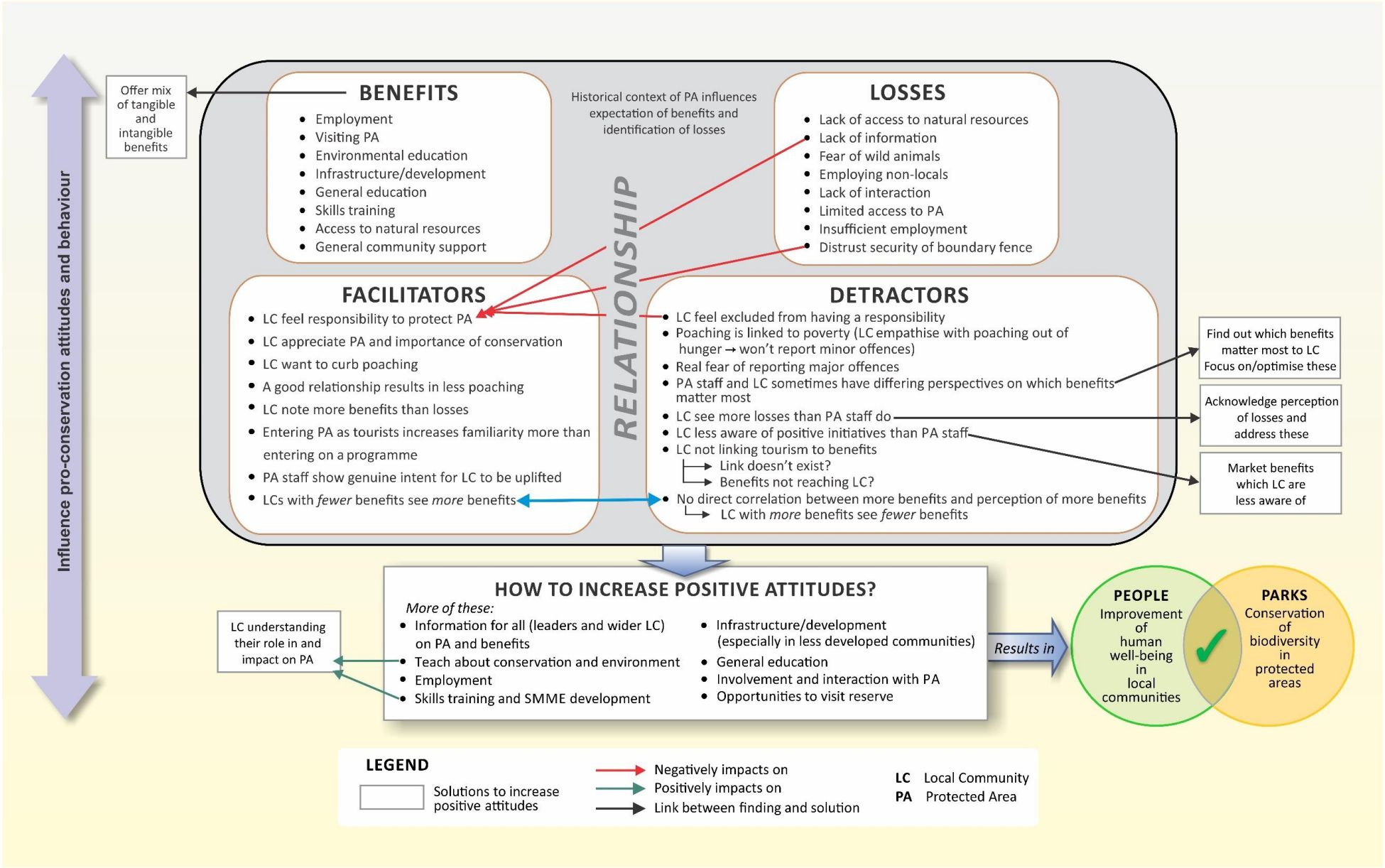



Figure 8.2: Theory of Influences on Pro-conservation Attitudes and Behaviour

As per its title, this schematic theory focuses on the influences on pro-conservation attitudes and behaviour. Hence, all elements within the diagram have an influence on attitudes and behaviour, and this is represented by the large bidirectional arrow running vertically across the schema on the left, entitled 'Influence pro-conservation attitudes and behaviour'. This could be a negative or positive influence, as is explained below. The theory has three sections (Points 'a', 'b' and 'd'), and several types of relational links (Point 'c').

***(a) Influences on relationship***

At the start of this study, the relationship between the local community and the protected area was probed in RO 3, with the view that relationship was **one** aspect that influences pro-conservation attitudes and behaviour. The overarching research gap in Section 1.2 suggested that relationship was important, but that limited theory on this existed. However, towards the close of the study, the data revealed that RO 2 (C1's knowledge and experience of the reserve); RO 4 (the benefits received and losses incurred by C1, as well as other influencing factors); and RO 5 (C1's responsibility towards the reserve) **all impact on relationship.** Hence the relationship between the protected area and local community is central. In Figure 8.2, this centrality is indicated by '**Relationship**' having the largest frame, and encompassing other elements of the theory. This 'Relationship' frame depicts the current relationship.

'Relationship' is connected to the focus of IPAB, namely the influences on pro-conservation attitudes and behaviour as follows: while the elements depicted within the relationship frame influence relationship, they **also** influence pro-conservation attitudes and sometimes pro-conservation behaviour.

The benefits and losses impact on the relationship. The theory depicts the top benefits and losses that emerged as meta-themes. '**Benefits**' and '**Losses**' are each presented in their own frame within the 'Relationship' frame. For another protected area, these may well be different, and the user could adapt the theory accordingly. As explained in Section 7.4.7, the researcher decided to move away from the term 'Other factors' as these can all be integrated into benefits and losses. In addition, the term 'costs' has been discarded as it conjures up an image of financial costs, and this is seldom the 'cost' that communities have to bear. 'Losses' is a more all-encompassing term. 'Historical context' is placed between 'Benefits' and 'Losses' as it influences expectation of benefits and identification of losses.

The benefits received and losses incurred by the local community at the three case study sites clearly emerged as influences on their attitudes and sometimes their behaviour. The study showed that losses do indeed cause negative attitudes towards conservation which, in turn, impact on behaviour. For example, if locals lack information or distrust the security of the fence, this negatively impacts on them displaying pro-conservation behaviour in terms of their responsibility to protect the reserve, for example, reporting fires, escaped animals or poachers. Conversely, benefits do increase positive attitudes towards the protected area. For example, when locals can visit the protected area, or are

employed, or know someone who is employed, this clearly increases positivity. While pro-conservation attitudes emerge more readily than pro-conservation behaviour, each case study shows evidence of actual behavioural actions that are positive towards the protected area. For example, at Dinokeng, locals protect the boundary wall and report escaped animals; at Mkhambathi they report fires, poachers and escaped animals; and at Phinda, local people are the eyes and ears for the reserve, reporting suspicious behaviour, and even catching poachers. On occasions, initiatives and the desire to practise pro-conservation behaviour are mentioned. For example, at Mkhambathi young ladies were keen on initiating a community-run clean-up campaign within the reserve, while at Phinda, suggestions were made for the community to conduct an anti-rhino poaching campaign and to start a recycling facility.

The two other frames within the 'Relationship' frame are those of the '**Facilitators**' and '**Detractors**'. These also influence the attitudes and behaviour of the communities in this research, which live adjacent to the reserves. 'Facilitators' refer to elements that are not benefits but that emerged from the data as positive elements that are relevant to the relationship and to the nurturing of pro-conservation attitudes and behaviour. 'Detractors' are elements that detract from a good relationship and the nurturing of pro-conservation attitudes and behaviour. Protected area management would need to be aware of the elements within these two frames that either facilitate or detract from a good relationship with the local community. Another protected area might have its own set of facilitators and detractors, but some of those expounded here could apply to them too.

***(b) Solutions to increase positive attitudes***

Outside of the larger frame, are the solutions to improve positive attitudes towards the protected area. These are indicated within rectangles to the left and right of, and below the 'Relationship' frame. Solutions **provided by participants** are depicted in the **large solution rectangle** (entitled '**How to increase positive attitudes?**') at the bottom of the schematic theory. It is important to focus on what the community want, instead of misguided effort in the wrong direction. Employment is an expected one and is certainly important. However, some others may be simpler to implement in the short term. For example, providing more information on the reserve, teaching on conservation and the environment, and involving and interacting more with the community.

The **smaller solution rectangles** on the extreme left and right of the schematic theory are **logical deductions based on key findings**, and are fairly simple solutions to implement. For these, the thin black arrows connect each finding to its respective solution. For example, a detractor is that 'LC less aware of positive initiatives than PA staff'. The thin black arrow leads to its solution box, namely 'Market benefits which LC are less aware of'.

***(c) Relational links***

The **one-directional thin black arrows** linking findings to solutions are mentioned in the previous paragraph. In another example, it was found that the community participants 'saw' more losses than

protected area staff. The solution to this is that these perceptions of losses are acknowledged and addressed, even if reserve staff do not see these as losses. Perceptions are powerful.

Further linkages between the different sections of the theory that emerged from the data, are shown with **thin red arrows** (which mean 'negatively impacts on …') and **thin green arrows** (which mean 'positively impacts on …'). These are interesting findings. Lack of information, distrust of the security of the boundary fence and feeling excluded from having a responsibility, all impact negatively on local people's sense of responsibility towards the reserve. The implication is that if information were supplied, if there were more trust in the boundary fence, and if local people were given clear responsibilities towards protecting the reserve, they would, in turn, protect the reserve more. This would be a win for biodiversity conservation. Furthermore, the theory indicates that teaching about conservation and the environment as well as providing skills training and SMME development positively impacts on local people understanding their role in, and impact on the protected area. This knowledge is a further win for biodiversity conservation.

The **bi-directional thin blue arrow** between the 'Facilitators' and 'Detractors' frame is interesting to reflect on. In this research, it emerged that the communities with fewer benefits 'saw' more benefits; while the community with more benefits 'saw' fewer benefits. Hence, there was no direct correlation between a community having more benefits and that same community perceiving more benefits. The researcher is not suggesting that the flow of benefits be slowed, since communities will not 'see it' in any case, but it does perhaps highlight the danger of communities that receive a fair amount of benefits not noticing these benefits as much as communities who receive less. It could be high expectations that have developed over the years or that the people are now accustomed to the benefits, and no longer view them as benefits from the reserve. On the positive side, for reserves that can only deliver limited benefits, if these are well chosen in discussion with the community, and optimised, positive attitudes can still result from these.

The '**Results in**' arrow at the end of the theory is explained below.

***(d) Output***

The theory concludes by inferring that once the relationship has been assessed and interpreted by staff in protected areas (optimising benefits and understanding facilitators; and minimising losses and understanding detractors), and solutions to increase positivity have been harnessed – this should **result in** a positive middle ground between the protected area ('**Parks'**) and the local community ('**People**'). This **positive middle ground** implies enhanced pro-conservation attitudes when compared to previous situations, and resultant pro-conservation behaviour, because community wellbeing is being improved.

### 8.2.3 Comparing the IPAB Theory to existing schema

Comparing the IPAB Theory to existing schema constitutes the **third stage of literature comparison** within this study, and takes place in this section. The schema are then revisited in Section 8.4 when the new framework is developed. At that point, the researcher integrates her work with that of other authors, and valuable elements that are not found in IPAB, but are in other schema, are considered.

#### *8.2.3.1 Schema that include the community and conservation*

This section compares the IPAB Theory emanating from this research with six other schema that include both the community and the conservation area. These were set out in Section 2.10.1 of the literature review. While there may be areas of overlap, the researcher did not encounter anything that represented the dynamics and interaction of the pertinent phenomena as IPAB does.

***(a) Linkages among biodiversity conservation, livelihood improvement and tourism development (Nyaupane & Poudel, 2011)***

The framework of Nyaupane and Poudel (2011) is very different to the IPAB Theory. It aligns itself with the 'triple bottom line' model (also known as the three pillars of sustainability), namely economic, social and environmental, through its components of 'Tourism development', 'Livelihood improvement' and 'Biodiversity conservation' respectively. While these are embedded in IPAB, the theory differs from several other schema by not placing these three pillars as key departure points. Furthermore, Nyaupane and Poudel (2011:1361) advocate for "Less dependency on natural resources". This contrasts with what emerged in this PhD research, namely that access to natural resources (for example, collecting grass for thatching within Mkhambathi) is an important benefit in some communities, and is hence listed as a benefit in IPAB.

***(b) Framework to balance conservation and development through synergistic relationships (Ross & Wall, 1999)***

Ross and Wall's (1999) framework presents a centralised management style, which does not make provision for co-management with local communities. While the link between local communities and management in their framework is just one of the relationships, IPAB places this relationship as its primary focus, with integration of people and parks being core to it. Moreover, they present this link as a one-way arrow indicating that management provide outreach programmes and enforce use zones (i.e. it is not a two-way dynamic). In addition, while the environment and management are presented as stand-alone entities in this framework, they are infused throughout IPAB. Finally, although tourism would contribute to some of the benefits that are mentioned in IPAB, it is not a focus of the theory. Overall, IPAB is quite different from this rather static traditional framework with its one-way relationships.

In terms of the adaptation by Tsaur *et al.* (2006) of Ross and Wall's (1999) framework, the two-way arrows are more akin to the relationship between the community and protected area, which is central to IPAB. Moreover, the adaptation by Tsaur *et al.* (2006), indicating that these relationships are of an economic, social and environmental nature, is helpful. While IPAB does not separate these, all three are intrinsic to the theory in the context of the relationship between the community and protected area. For example, there are social and economic benefits; and some of the facilitators and solutions to increase positive attitudes are aimed at environmental conservation, as well as improvement of human wellbeing. In fact, the latter two are the ultimate outputs of the theory.

***(c) The linked incentives model of direct linkage as a conservation strategy (Salafsky & Wollenberg, 2000)***

While the linked incentives model does consider livelihood creation for the community (IPAB mentions 'Employment' and 'Skills training') and biodiversity conservation, its focus is on different livelihood strategies as the key factor in improving biodiversity conservation. It thus has a different purpose to IPAB, which has a wider focus on the multiple influences on pro-conservation attitudes and behaviour.

***(d) Park-people relationship framework (Allendorf, 2010)***

This framework has a logical layout presenting the different layers of influence on the people-parks relationship. IPAB, which was entirely derived from data, does not represent these layers, though some are inherent within the benefits and losses within IPAB, for example, employment is part of economic context, while interaction and education form part of social context. Similarities are that the relationship between the individual and protected area is core to the schema, as well as the focus on attitudes.

***(e) Framework depicting reciprocity in protected area-community relationships (Mutanga et al., 2015a)***

The frameworks of Mutanga *et al.* (2015a) and Allendorf (2010) are the only ones that clearly consider both protected area staff **and** the community as the **core** of their schema. Mutanga *et al.* (2015a) published their research in February 2015 (just after the researcher had completed the first literature review), and the researcher encountered their work (which has some similarities to the present work) when reviewing newer literature after the findings had been written up. The lack of dual focus on protected area staff/tourism staff and the local community is one of the gaps identified in the present thesis. However, in the IPAB Theory of this thesis, these two are not separated – yet the data that led to the theory did come from both parties, and the importance of both is indicated by the two circles at the end of IPAB. Other similarities to IPAB are that it also mentions benefits and costs (termed losses in the IPAB Theory); and historical context (situated within the large 'Relationship' frame in IPAB). Regarding historical context, Mutanga *et al.* (2015a) do not link this to benefits and costs, while IPAB states that the historical context influences expectation of benefits and identification of losses. A significant difference is that in Mutanga *et al.* (2015a), relationship is viewed as a stand-alone entity, whereas in

IPAB, relationship is embedded within benefits, losses, facilitators and detractors, suggesting that all these influence relationship. In addition, this model does not enter into detail on benefits and losses, which constitutes a focus of IPAB. Mutanga *et al*. (2015a) also mention socio-demographic factors which emerged in Chapter 2, but did not form part of this study because data gathering amongst the community was done in groups, which prevented the gathering of individual socio-demographic variables which could be compared to other findings.

***(f) Contribution of perceptions to evaluations of conservation and generation of local support for conservation (Bennett, 2016)***

Of similarity to IPAB is that this schema also mentions history [in Bennett (2016) it falls under 'Social context'; and IPAB depicts it within the 'Relationship' frame]. The model differs in that it incorporates more psychological aspects such as norms, values and beliefs that influence perceptions, and is broader and more generic. The mention of culture and politics is particularly pertinent as factors that influence the social context. The most significant difference, however, is that it is more conservation-orientated than people-orientated. The end outcome of the model regards 'Levels of support for conservation', whereas IPAB has the final outcome of achieving a win-win for conservation and human wellbeing. While the finer print under Bennett's (2016) 'Levels of support for conservation' does mention 'financial support', in this PhD research, in the context of the three case studies investigated, findings show that to have a win-win, other facilitators and benefits are also important. In addition, Bennett's schema does not focus on benefits and losses.

#### *8.2.3.2 Schema that focus on the community*

Though the schema set out in this section focus only on the community, and not on conservation, they are still relevant to the phenomena investigated in this study. The schema and a brief explanation can be found in Section 2.10.2 of the literature review. At this point in the thesis, they are reconsidered to determine any overlap with IPAB. This is indicated in Table 8.1.

The exercise above of comparing IPAB to existing schema has revealed a few similarities, but predominantly shows that IPAB is unique, differing from other schema in terms of its focus, structure and the elements involved.

Before concluding this research objective, the author briefly considers the concept of theory pretence.

Table 8.1: Schema that focus on community: Overlap with IPAB Theory

| Name of schema | Author/s | Overlap with IPAB Theory |
|---|---|---|
| (a) Sustainable Livelihoods Framework | (Scoones, 1998) | While a conservation area would comprise an institution that has influence on local livelihood (as is central to Scoones' framework), the framework's focus is people (local community). Hence it differs significantly from IPAB, which considers both people and parks. |
| (b) Revised model of local participation in planning and managing ecotourism | (Garrod *et al*., 2001 in Garrod, 2003) | No clear overlap exists, except that the step of 'collective decision-making as to the scope and nature of ecotourism development' has similarities to the small solution rectangle in IPAB which proposes finding out which benefits matter most to locals and optimising these. |
| (c) The 'Stool Model' of collaboration for community-based monitoring and education | (Brook *et al.,* 2009) | This model depicts the importance of collaboration and education. The latter is in IPAB as a benefit and as a solution to increase positivity; while 'Involvement and interaction with PA' (similar to collaboration) is another solution in IPAB to increase positivity. |
| (d) Community-Based Tourism E model | (Giampiccoli *et al*., 2015) | Education is mentioned, which Giampiccoli and co-authors explain also includes the advancement of skills. In IPAB, both education and skills training are included in the 'Benefits' frame and the 'How to increase positive attitudes' solution rectangle. |

### 8.2.4 Theory defence

Suddaby (2006) and Tan (2010) refer to 'theory pretence'. Three characteristics of a 'pretend theory' are mentioned below, and, for each one, the researcher briefly motivates why these do not apply to IPAB, thereby defending the theory.

***(a) The theory merely describes phenomena without conceptualisation and the inclusion of relationships***

IPAB contains various different conceptual structures, namely the 'Relationship' frame, which contains 'Benefits, 'Losses', Facilitators' and 'Detractors'; the various solutions to improve positive attitudes; and the resultant likely outcome of successfully attaining middle ground which results in human wellbeing and biodiversity conservation. Suddaby (2006) also mentions 'moving beyond the obvious'. In IPAB, 'Benefits' and 'Losses' may be obvious. However, 'Facilitators' and 'Detractors' and the unexpected find that 'Relationship' is not a single isolated influence on pro-conservation attitudes and behaviour, but permeates the theory, lift IPAB to a conceptual level that is not obvious. Moreover, several types of relational links are represented in the theory, such as 'Negatively impacts on', 'Positively impacts on' and links between findings and their respective solutions. The presence of linkages between concepts, and a logical flow of ideas are also mentioned by Corbin and Strauss (2008) as criteria against which a

theory can be judged. Some of the findings in IPAB are surprising and certainly interesting, again taking the theory beyond the obvious.

***(b) The theory only addresses the 'what' component, and not the 'how'***

The various sections of the theory as explained above, and the relational links between these demonstrate the 'how' of the theory. If the researcher only included the various frames (with their content) and solution boxes in isolation, the theory could be viewed as 'pretend'. However, the various components, links, positive and negative elements, as well as how to move forward in improving attitudes and behaviour (solutions), increase the dynamics of the theory.

***(c) No step by step explanation of how theoretical insights have been built up***

Barbour (2001) mentions the problem of the reader having to take it on trust that theory has emerged from data, without a detailed explanation of how the researcher got there. Similarly Cohen *et al*. (2011) indicate closeness of fit between theory and data as a criterium against which to judge a theory. Figure 1.3 explains the step by step process followed in this research to ultimately reach the point of constructing the IPAB Theory. In brief, research consisting of multiple qualitative methods was undertaken with two different constituencies at three case study sites. For each case study, each question asked to participants was analysed and interpreted, and then summarised (Analysis and interpretation layer 1). Bar graphs presenting the data of all three cases, together with the summaries, were used to conduct cross-case analysis, which resulted in meta-themes for each research objective (Analysis and interpretation layer 2). The meta-themes were then used to construct the middle-range substantive theory and the recommendations for implementation (Analysis and interpretation layer 3). In addition, the detail regarding the coding process and data analysis is contained in Chapter 3 as well as in various appendices. The idea is that the research process is sufficiently explained, so that the process of how the data led to the theory is clear. Furthermore, a researcher wishing to replicate this methodology would have the necessary information to do so.

### 8.2.5 Conclusion to achievement of Research Objective 7.1

The construction of a theory arose out of the research design of this study, specifically the use of multiple case studies and the use of a variant of grounded theory. RO 7.1 set out to construct a middle-range substantive theory that attempts to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions that give rise to pro- or anti-conservation attitudes and behaviours. This will never be perfect science, in fact adaptive management is a continual quest for the 'messy middle', through experimentation, monitoring thereof, and then followed by further adaptations (Sachedina & Nelson, 2010; Stoll-Kleemann, 2005; Torquebiau & Taylor, 2009). However, for the cases presented in this study, via the benefits, losses, facilitators, detractors and various solutions, IPAB does explain the influences on pro-conservation attitudes and behaviour, and the conditions that give rise to pro- or anti-conservation attitudes or behaviour.

Corbin and Strauss (2008) include 'creative contribution' as a test of the quality of a theory. While various schema exist (as set out in Section 2.10), the comparison between these schema and IPAB in Section 8.2.3 reveals that IPAB has a unique focus and is a departure from previous schema. It thus demonstrates the value of grounded theory in the sense of producing a theory (contribution) that is entirely data derived and not unduly influenced by prior research. In addition, by holding the IPAB Theory up against the characteristics of theory pretense, its labelling as a theory is justified.

In closing, it is appropriate to refer to Stoll-Kleemann *et al.* (2010:236) who posit that protected area managers can "inspire and coordinate collective action that is coherent with the dual goal of local development and conservation and may be compatible and coordinated with that of actors [outside the PA]." The IPAB Theory is a tool to assist protected area managers in driving this collective effort that can result in a better 'messy middle' that is a win-win for economic and social development in local communities, as well as biodiversity conservation in protected areas.

## 8.3 Achieving Research Objective 7.2 (Recommendations)

**RO 7.2: To develop recommendations for implementation of the theory for both the communities and the managements of protected areas, in order to facilitate a positive relationship, aiming for improved achievement of the dual goals of biodiversity conservation and community wellbeing.**

### 8.3.1 Introduction to the recommendations

The recommendations emanate from the meta-themes emerging in Chapter 7 (Cross-case analysis and interpretation). The meta-themes are based on the data from the three case studies. Since the theory was also derived from the meta-themes, these recommendations can assist in the practical implementation of the IPAB Theory. The recommendations for community members are novel, since most guidelines focus on what management of protected areas or government should do. However, this research acknowledges that communities also have a role to play in facilitating a good relationship, and in fostering economic and social development as well as biodiversity conservation. While the recommendations are contextualised to the three case studies, they could be helpful to other protected area managements and staff, as well as assisting different local communities to view themselves as active participants in fostering good relationships. As with the theory above, the researcher views this as an assortment, from which readers can add, remove or adapt elements, thus customising it to their own context. Since these are practical recommendations addressed to protected area managers and local communities, they are written in the second person.

### 8.3.2 Recommendations for protected area managers

***(a) Information and communication***

- Communication and information are important and greatly desired by the community. One means of increasing the flow of information is to appoint community liaison officers.
- Disseminate general information on the reserve to all sectors of the community, not only community leaders.
- Provide information that demonstrates the range of facilities and infrastructural gains due to the presence of the protected area (such as roads, community halls and bus shelters). While locals may notice schools and clinics, the existence of other facilities and infrastructure often do not get attributed to the presence of the protected area.
- Ensure that initiatives run/supported by the protected area that benefit the community, are known to both community leaders and the wider community. At each reserve there are community projects, education/training initiatives, and facilities and infrastructure that can be attributed to the protected area, but that locals did not mention. It is important that these are known to the community. These initiatives should be communicated regularly to the community to enhance realisation of positive changes brought about due to the presence of the reserve. The initiative **and** information dissemination about it are therefore equally important. If the community are unaware of these initiatives, it greatly diminishes the chance of the initiative (benefit) influencing pro-conservation attitudes and behaviour, and an opportunity to build positivity towards the reserve, is wasted.
- The community always mentioned more losses than staff of the protected area mentioned. Whether you agree that these are losses or not, they are perceptions held by the community, and are powerful in influencing pro-conservation attitudes and behaviour. Hence, these need to be explicitly acknowledged and addressed via environmental education, awareness and provision of information.
- To mitigate unrealistic expectations from the community, which may even be unfair on protected areas, and fall outside of their responsibilities, educate communities on the different organisations involved, who is responsible for what, and what the correct communication channels are for each organisation. Furthermore, openly discuss the limitations and realistic reach of the benefits offered.

***(b) Interaction with community***

- Collaboration, involvement and interaction are important in improving positivity towards the protected area, are desired by the community, and help them to better understand conservation and their role in it. Harness this intangible benefit in a variety of ways: target newcomers to the area; bring locals into the protected area; host workshops; and interact regularly with leadership and the wider community (find out what is working and what is not working). Interaction need not be complex and expensive. Simpler lower-budget initiatives include, for example, clean-up campaigns with the community; space for locals to have their own vegetable gardens; and school recycling competitions.

***(c) Education***

- Education-related benefits are important in uplifting the local community and increasing the positive image of the reserve. These are highly visible benefits which can impact on most members of the community.
- The fact that communities rate learning/training about the environment and animals as a top benefit, is very positive. Locals attribute value to the environment and want to learn about it. If possible, grow your environmental educational programs beyond the target of school children only. Utilise community gatherings to teach and interact in this regard.

***(d) Employment and skills development***

- Employment is vital. It is the second-most mentioned positive change and by far the most mentioned benefit. Hence, where possible, increase employment opportunities for local people.
- Lack of employment also emerged as a loss. While it could be argued that there are more jobs now with the existence of the reserves than beforehand, and hence this should not be viewed as a loss, lack of employment remains a perception of participants. Cognisance should be taken of this.
- Avoid employment of non-locals as far as possible, since this is a clear cause of negativity towards the protected area.
- Skills training (either for permanent employment or an SMME opportunity) and SMME development improve positivity towards the reserve.

***(e) Use of the land***

- If access to natural resources in a sustainable manner is possible, facilitate this since it results in positivity towards the reserve, while lack of access causes negativity. Where it is not possible, be meticulous in addressing the reasons for this at information sessions.
- Acknowledge the cultural and historical importance of the land to local people. Access to sites for rituals and to ancestors' graves within the protected area should be promoted and facilitated, for example, by having official visitation days and offering transport.

***(f) Custodianship***

- The community are positive regarding having a responsibility to protect the reserve. They value the environment and want to learn more in order to be able to protect it. When local people feel that they cannot be involved in this way, it results in negativity and a notion of exclusion. Nurture this sense of custodianship and encourage the community to see themselves as vital protectors, empowering them through environmental education initiatives. Ensure that locals always know what actions to take in different situations and who to contact at the reserve (for example, when suspicious people are noticed or a fire starts).
- To set local people at ease, ensure boundaries are safe and reassure locals in this regard. If the community do not trust the boundary, it increases their fear of wild animals and appears to negatively affect their sense of responsibility towards helping to protect the park. Some animals/snakes cannot be contained, so provide knowledge on how to handle these, and who to contact if dangerous species 'escape'.

- Community members are reluctant to report minor poaching offences. Consider having these incidents dealt with differently, perhaps via the tribal authority instead of via formal punitive structures.
- Community members have a real fear of reporting poachers. Consider implementing anonymous reporting structures.
- Where possible, support poverty-stricken families in the community. While local people want to curb poaching, they are sympathetic to those who poach bush meat out of hunger and are unlikely to report these incidents.

***(g) General***

- Find out which benefits matter most to the surrounding community and optimise those.
- Both tangible and intangible benefits are important. Do not focus on one to the exclusion of the other. When budgets are small, focus on intangible benefits which are less expensive to implement; when budgets are large, do not neglect the power of the intangibles in winning the support of local people.
- Facilitate regular visits to the reserve, across different sectors and age groups of the community. These are powerful in increasing positivity and an understanding of conservation. Consider using buses instead of game viewing vehicles in order to take more children into the reserve. For adults, consider dual-pricing, day visits in the off-season or special packages for locals (for example a game drive and dinner). When communities perceive the reserve as inaccessible, it increases negativity.
- Relatively small gestures can make a large impact on the positive image of the reserve in the eyes of the community. For example, donations of meat at Phinda for community functions was regularly mentioned as an initiative that was appreciated.
- Focus on building the link between tourism and benefits, so that local people understand that tourism provides benefits and that they indeed benefit from regular revenue from tourism, interaction with tourists, donations, sponsorships, etc. Create mechanisms to enable interaction with tourists, such as tourists visiting the local community; earmarking projects (in discussion with the community) that tourists can contribute to; and facilitating opportunities for communities to showcase their culture (for example, arts and crafts or a community choir, dance or music group).
- Involving and benefiting communities cannot be an afterthought. It needs to be part of planning from the start.
- Keep working on the relationship with the community. Strong relationships take much effort, patience and many years to establish.

### 8.3.3 Recommendations for local communities

- Acknowledge that the protected area can never employ everyone. Be creative in seeking out entrepreneurial opportunities that can provide income, support biodiversity conservation, and add value to the tourism product.

- Communities rate learning about the environment and animals as a top benefit. Start environmental clubs and groups in your community, not only in schools, but in neighbourhoods. Use these to teach and interact with your fellow community members regarding environmental awareness and sustainable practices in your own community; as well as the importance of and reasons for conserving the neighbouring protected area.
- Invite staff from the protected area to address clubs, societies and community meetings for both young and old, on environmental topics that interest you.
- Encourage pride in the fact that you live adjacent to a protected area. Explain to those around you why conservation is important.
- Take the initiative in requesting information sessions about the reserve with protected area staff.
- Have open and healthy dialogue with reserve management on which benefits matter the most to you, and on feasible ways in which these can be optimised. Be realistic regarding the amount of benefits and type of benefit that can come from a protected area. Creatively consider what can be offered to your community, and approach protected area staff with these suggestions (for example, meat for special community functions, vegetable gardens which make use of the protected area's water supply, and seed funding for a local recycling plant).
- Take the initiative in increasing visitation to the protected area, for example, a society could gather a group of people who want to visit, and approach protected area staff regarding a special package deal.
- While natural resource use is often not encouraged due to the need to conserve, protected areas may allow access for special once-off requests. Engage with protected area staff should the need for this arise.
- Work with protected area staff to maximise opportunities from tourism. Create simple, authentic tourism products and activities that will attract tourists to your community, as many tourists today are seeking this. Examples include arts and crafts; community dance, music or choir groups; creating opportunities/tours for tourists to visit the community; and local gastronomy.
- Encourage inter-cultural contact between community members and tourists. Many tourists want this type of interaction, and community members will also benefit from this exposure.
- Show tourists the social development needs in the community, providing them with an opportunity to sponsor a community upliftment initiative.

The recommendations above achieve Research Objective 7.2.

## 8.4 Achieving Research Objective 8 (Framework)

**RO 8: To develop a comprehensive integrated framework representing the components that can influence people-park relationships**

### 8.4.1 Development of the People Parks Win-Win Framework

In this section, a comprehensive integrated framework representing the components that can influence people-park relationships is developed. This framework is called the People Parks Win-Win Framework (PPWW). The process of developing the framework constitutes the **fourth and final layer of analysis and interpretation** in this thesis.

A framework comprises an overview of concepts and the relations between them that are presumed to account for a phenomenon (Sabatier, 2007 in Nilsen, 2015). A framework usually contains generic concepts that are not detailed enough to guide the user through step-by-step implementation (Nilsen, 2015). The Business Dictionary defines a framework as a broad overview or outline "of interlinked items which supports a particular approach to a specific objective, and serves as a guide that can be modified as required by adding or deleting items" (Business Dictionary, 2018:n.p.). Finally, the Collins Compact Dictionary offers a simpler version, stating that a framework is a "structure into which completing parts can be fitted" (McLeod, 1984:203).

To develop the PPWW Framework, information taken from four areas of the thesis is combined. Each of the four areas has been given an abbreviation, which is indicated in parentheses in the bulleted list below. With three of these areas referring to existing literature, the process followed in Section 8.4.1 demonstrates the **fourth and final stage of literature comparison** in this research.

- The IPAB Theory constructed using only the primary data from this PhD research (IPAB).
- Concepts from schema presented in Section 2.10.1 which consider both the community and conservation (C & C).
- Concepts from schema presented in Section 2.10.2 that focus on the community only (C)
- Literature from Chapter 2 (Chap 2)

Table 8.2 demonstrates the different layers of the framework and the components within each layer that the researcher incorporated into the framework. There are four layers overall (1. External context, 2. Stakeholders, 3. Community beneficiation, 4. Outputs), and these are indicated in green text. All other items in the first column are the components within each layer. The respective source of each layer and each component is also indicated. This is done by showing the reader from which area of the thesis it originates, as per the abbreviations in parentheses in the bulleted list (for example, 'Chap 2'); the section number within the thesis (for example, '2.7.1.1'); and the relevant author/s citation/s (for example, 'Stronza & Gordillo, 2008'). In order not to overload the table, for literature from Chapter 2, not all authors who mentioned a particular component are named in the 'Citation' column. To view all the authors, the reader can refer back to the relevant section within Chapter 2. To review the literature at a glance, the reader can consult Figure 2.13. The final column provides the original context of the component and explanation necessary to enable the reader to understand the component, and/or to explain any adaptations that have been made to it. The rows shaded in grey are used to explain the graphical relational links within the framework, i.e. the meaning of the various arrows.

The actual PPWW Framework follows the table in Figure 8.3. The reader is advised to 'unpack' the framework by overviewing the table and framework simultaneously.

Table 8.2: Components used to build the People Parks Win-Win Framework

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| **1. EXTERNAL CONTEXT** | | | | The idea of layers of influence is borrowed from Allendorf (2010). PPWW uses her 'Context' layer as outer layer, renaming it 'External context'. However, while Allendorf includes economic, historical, political, social and cultural within this layer, PPWW only uses the first three components. It integrates social and cultural within the next layer for 'Stakeholders'. |
| **ECONOMIC** | C & C | 2.10.1 | (Allendorf, 2010; Tsaur *et al.,* 2006) | The adaptation by Tsaur *et al.* (2006) of Ross and Wall's (1999) framework indicates three facets to the people-park relationship: economic, social and environmental. Unlike other schema, PPWW does not include these in the same layer nor as corners of a triangle. They are still present (highlighted in yellow), but distributed throughout the framework, in positions deemed most logical as per this research. This is a notable departure from previous schema. |
| **HISTORICAL** | C & C<br>IPAB | 2.10.1<br>8.2.2 | (Allendorf, 2010) | Allendorf includes 'Historical' as part of the broader context influencing the people-park relationship. In IPAB, 'Historical context' is centrally placed as it influences expectation of benefits and identification of losses. |
| **POLITICAL** | C & C<br>C | 2.10.1<br>2.10.2 | (Allendorf, 2010; Bennett, 2016)<br>(Scoones, 1998) | These authors include politics as an influence on context. In PPWW, this refers to country-wide politics, which, while part of external context, will often influence the 'Stakeholders' and 'Beneficiation' layers. For example, prior to elections, a community may be more unstable, government may make rash promises, and benefits from government could increase in a bid to win votes. In volatile political climates, foreign NGOs as external stakeholders may need to withdraw; and tourism would also suffer as tourists stay away. This in turn affects benefit flow to the community. |
| **2. STAKEHOLDERS** | | | | • This layer is also borrowed from Allendorf (2010), who labels it as 'Entities'. Here it is renamed 'Stakeholders'. In addition, PPWW includes 'Community' and 'Tourism management' as stakeholders, whereas Allendorf included only 'Park management', 'NGOs', and 'Government'.<br>• The sub-layer within this, 'Stakeholder characteristics' is the researcher's initiative, since, as seen in this research, the specific characteristics/circumstances of each stakeholder influence the relationship (highlighted in brown). |
| 'Relationship' arrow running across the top of the 'Stakeholders' layer | | | | It is not only the individual characteristics of each stakeholder that influence the remaining layers of the framework. The relationships and cooperation between the different stakeholders are also key to achieving a win-win scenario. |
| 'Constraints' arrow running across the top of the 'Stakeholders' layer | | | | While this framework focuses on the positives (components contributing towards a win-win scenario), there will always be constraints and challenges that work against these, which have a trickle-down effect throughout the other layers. |
| **COMMUNITY (SOCIAL)** | IPAB | 8.2.2 | | 'Community' is central to IPAB, since IPAB focuses on the relationship between community (people) and protected area management (parks). As indicated under 'Economic' above, the facets of the people-park relationship (economic, social and environmental) are distributed throughout the framework. |
| COMMUNITY CHARACTERISTICS | | | | |
| Livelihoods (Stable; Multiple strategies) | Chap 2 | 2.5.1<br>2.6 | (Stoll-Kleemann, 2005)<br>(Gurung & Seeland, 2011; Rahman *et al.,* 2017; Snyman, 2014) | This is briefly mentioned in 2.5.1, but discussed in 2.6 under 'Other factors' that could influence pro-conservation attitudes and/or behaviour. |
| Local governance structures | C & C | 2.10.1 | (Bennett, 2016) | Bennett's schema includes this as a facet that can influence support for conservation. PPWW uses it to represent governance structures at local community level. In South African rural areas, a combination of traditional tribal authority and local government is common. How the community is governed and by whom, can positively or negatively influence relationships with other stakeholders. |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| Conducive local context | Chap 2 | 2.5.2 | (Scanlon & Kull, 2009) | Scanlon and Kull refer to this as one of three conditions for progression from benefits to positive attitudes and behaviour. The other two are devolving power and equitable beneficiation (included further on in PPWW). Examples of conducive context could be a small or well-defined community. |
| Land ownership structure | Chap 2 | 2.4.2<br>2.6<br>2.7.1.1<br>2.7.1.2 | (Collins, 2016)<br>(Harihar *et al.,* 2015)<br>(Sachedina & Nelson, 2010<br>(Thondhlana *et al.,* 2016) | Land ownership is mentioned in several places within Chapter 2. Depending on the land ownership structure involved and the details of who is responsible for what within the structure, this component can positively or negatively influence attitudes and behaviour towards the park. |
| Socio-demographics | C & C<br>C<br>Chap 2 | 2.10.1<br>2.10.2<br>2.6 | (Mutanga *et al*., 2015a)<br>(Scoones, 1998)<br>(Mutanga *et al.*, 2015b; Snyman, 2014) | Mutanga *et al*. (2015a) include this in their schema as a major factor influencing the protected area-community relationship; while Scoones (1998) includes it under context. In Chapter 2, it is discussed under 'Other factors' that could influence pro-conservation attitudes and/or behaviour. |
| Community development objectives | Chap 2 | 2.4.2 | (Berkes, 2004) | This is mentioned in the context of risks involved when community development objectives do not align with conservation objectives. Relevant stakeholders need to determine how to align these two. |
| Place attachment (meaning of the land) | Chap 2 | 2.7.2 | (Bezerra, 2018; Mutanga *et al.,* 2015a; Thondhlana & Cundill, 2017) | Under 'Losses/costs', 'Lack of access to the land for cultural, spiritual and historical reasons' is mentioned. In PPWW, it is turned into a positive that park management needs to consider for a win-win situation. |
| Culture | C & C | 2.10.1 | (Bennett, 2016) | Bennett (2016) includes culture as an influence on context. PPWW includes culture as an influence on the community, e.g. certain cultures may not want the intrusion of tourism; some cultures may feel strongly regarding indigenous stewardship of natural resources; some cultures may be easier for other stakeholders to work with, etc. These characteristics will influence the role of other stakeholders, and the resulting benefits. |
| **PARK MANAGEMENT** | C & C | 2.10.1 | (Allendorf, 2010) | Refer to explanation under 'Stakeholders' above. For PPWW, 'Park management' refers to those responsible for managing a conservation area, whether it be a national park, reserve (private or public) or a private game farm. |
| PARK MANAGEMENT CHARACTERISTICS | | | | |
| Park management model | C & C | 2.10.1 | (Bennett, 2016) | Bennett's schema indicates 'Management models, inputs, actions and managers' as a part of 'Conservation initiative', which in turn generates support for conservation. In this study, different park management models produced different results, which in turn affect community perceptions. Hence it is added as a PPWW component. |
| Healthy natural **ENVIRONMENT** | C & C<br><br>C | 2.10.1<br><br>2.10.2 | (Ross & Wall, 1999; Tsaur *et al.,* 2006)<br>(Giampiccoli *et al.,* 2015) | Care of environment is inherent in the model of Giampiccoli *et al*. (2015); while importance of biodiversity as a benchmark for a healthy natural environment that tourists want to visit, is in Ross and Wall's (1999) framework. As indicated earlier, facets of the people-park relationship (economic, social and environmental) are distributed throughout PPWW. PPWW includes 'Environment' within 'Park management' as this is usually their core responsibility. |
| Conservation objectives | Chap 2 | 2.4.2 | (Berkes, 2004) | Berkes mentions this in the context of risks inherent when conservation and development objectives do not align. PPWW indicates that park management need to consider community development **and** conservation objectives. |
| Two-way arrow between 'Community development objectives' and 'Conservation objectives' | Chap 2 | 2.4.2 | (Berkes, 2004; McShane *et al.,* 2011; Stoll-Kleemann *et al.,* 2010) | These authors refer to the risks when the objectives of community development and conservation do not align. The arrow indicates the need for this alignment. |
| **TOURISM MANAGEMENT** | C & C | 2.10.1 | (Ross & Wall, 1999) | Refer to explanation under 'Stakeholders' above. |
| TOURISM MANAGEMENT CHARACTERISTICS | | | | |
| Stage of tourism development | C & C | 2.10.1 | (McCleave *et al.,* 2006) | These authors developed the 'Model of New-Zealand people-park relationship' (explained at the start of 2.10.1), from which this component is borrowed. Tourism that is well established (e.g. Phinda) could have more benefit flow to communities than a park where tourism is still in its infancy (e.g. Dinokeng) or struggling (e.g. Mkhambathi). |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| Healthy tourism industry within park | C & C | 2.10.1 | (Ross & Wall, 1999) | The importance of tourism as the means to provide benefits is borrowed from Ross and Wall (1999). |
| Two-way arrow between 'Healthy natural environment' and 'Healthy tourism industry within park' | C & C | 2.10.1 | (Ross & Wall, 1999) | The focus on 'Biological diversity' and 'Tourism' in Ross and Wall's (1999) framework shows the importance of a healthy environment and healthy tourism respectively. The present framework represents this relationship differently by demonstrating that a healthy environment and healthy tourism industry are essential for benefits to flow to the community. |
| Healthy tourism industry within community | IPAB | 8.2.2 | | In IPAB, 'SMME development' is noted as a means to improve positivity. If local communities are involved in the creation and management of tourism products, this can result in increased social and economic benefits. |
| **EXTERNAL STAKEHOLDERS** | C & C | 2.10.1 | (Allendorf, 2010) | Allendorf refers to 'NGOs' as an 'Entity'. PPWW broadens it to 'External stakeholders'. These could include NGOs, private individuals, charities, educational institutions, etc. |
| EXTERNAL STAKEHOLDER CHARACTERISTICS | | | | |
| • Commitment to community projects<br>• Adequate equipping and empowering | Chap 2 | 2.7.2 | (Tolkach & King, 2015) | 'NGOs withdrawing too soon' can result in losses for the community. To turn this into a component which external stakeholders should be aware of for a win-win, their commitment to the community, and adequate equipping and empowering are included in PPWW. |
| **GOVERNMENT** | C & C | 2.10.1 | (Allendorf, 2010) | Refer to note under 'Stakeholders' above. Allendorf mentions 'Political' as part of 'Context', and 'Government' as an 'Entity'. PPWW, however, places 'Government' as a 'Stakeholder'. |
| LOCAL GOVERNMENT CHARACTERISTICS | | | | |
| Stability | | 4.3.9 | | The Dinokeng results in this research indicate that, just prior to the local elections, it was difficult to build on the relationship with the community, and projects (e.g. soup kitchen) remained on hold until afterwards. Hence stability is a necessary ingredient for a win-win relationship. |
| Efficiency | | 5.2.4<br>5.4.3<br>4.3.4 | | Mkhambathi's results reveal frustration with government inertia and complex procedures to procure simple items. This affects ability of park staff to work effectively. Lengthy government timeframes are a constraint at Dinokeng (promised school yet to be built. Efficiency of local government hence influences people-park relationships. |
| One-way arrow between 'Political' and 'Government' | | | | This arrow indicates that the political external context influences 'Local government'. |
| Green and peach coloured block arrows running downwards through framework | | | | The researcher used two large coloured arrows that run from upper to lower half of PPWW, to indicate that:<br>1. Community characteristics will influence their perception of benefits (green).<br>2. The other stakeholders are involved in generating benefits (some more than others) and their characteristics will influence the generation of benefits (peach). |
| **3. COMMUNITY BENEFICIATION** | Chap 2 | 2.5<br>2.5.1<br>2.5.1<br><br>2.5.2 | **1.** (Liu *et al.,* 2014; Reimer & Walter, 2013; Scanlon & Kull, 2009)<br>**2.** (Black, 2015; Kideghesho *et al.*, 2007; Mehta & Heinen, 2001)<br>**3.** (Biodiversity Conservation Network, 1999; Gadd, 2005; Hulme & Murphree, 1999; Kideghesho *et al*., 2007; Mbaiwa, 2005; Ogunbode, 2013; Shibia, 2010; Tran & Walter, 2014) | Section 2.5 discusses various schools of thought on linkages between benefits and losses, pro-conservation attitudes and behaviour. Several found a link between **benefits and attitudes** (first group of authors in previous column); others include **lack of benefits or costs as influencing attitudes** (second group); others extend **receipt of benefits to changing attitudes *and* behaviour** (third group); and some assert that it is also **lack of benefits or losses that influence attitudes *and* behaviour** (fourth group). **Taken cumulatively, there is strong support in literature for the notion that benefits and losses influence attitudes, which in turn influence behaviour.**<br>**In this research, benefits and losses emerged as key in influencing attitudes, with some links to behaviour** also found. Hence, benefits and losses are central within IPAB, which focuses on the influences on pro-conservation attitudes and behaviour.<br>**Therefore, based on previous research and the present study, PPWW includes a layer dedicated to 'Community beneficiation'**. Some C & C Schema mention benefits [Mutanga *et al*. (2015) include 'Benefits and Costs'; Ross and |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| | | 2.5.2 | **4.** (Burgoyne & Mearns, 2017; Odindi & Ayirebi, 2010; Thondhlana *et al.*, 2016) | Wall (1999) refer to 'Outreach Programs'; and Salafsky and Wollenberg (2000) mention 'Benefits'] and Nyaupane and Poudel (2011) list a few examples of benefits (e.g. jobs, education and infrastructure). However, PPWW's focus on the main benefits is a notable departure from existing schema. Losses are excluded, since PPWW focuses on requirements for a win-win relationship. |
| | IPAB | 8.2.2 | | |
| **TANGIBLE BENEFITS** | | | | In IPAB, benefits emerging from the data are mentioned under 'Benefits'. PPWW sub-divides these into 'Tangible benefits' and 'Intangible benefits'. |
| Formal employment | Chap 2 | 2.7.1.1 | (Collins, 2016; Lee, 2013; Mbaiwa & Stronza, 2010) | Formal employment is discussed as a tangible/direct benefit in 2.7.1.1, and is the most commonly cited of these. It is also the first 'Benefit' mentioned in IPAB (Figure 8.2). Avoidance of employing outsiders emerged as a factor that negatively influences pro-conservation attitudes. In IPAB, 'Employing non-locals' is noted as a 'loss'. |
| (Avoid employing 'outsiders' as far as possible) | | 2.6 | (Saufi *et al.*, 2014; Mutanga *et al.,* 2017; Thondhlana *et al.,* 2016) | |
| | IPAB | 8.2.2 | | |
| Informal employment and entrepreneurship/ SMME development | Chap 2 | 2.7.1.1 | (Lee, 2013; Roe & Elliott, 2006; Stronza & Gordillo, 2008; Swemmer *et al*., 2017) | 'Informal/indirect employment' is a tangible/direct benefit in 2.7.1.1, and includes entrepreneurship and small business opportunities. Giampiccoli *et al.* (2015) place 'Entrepreneurship' within their 'CBT E model'; while IPAB mentions 'Skills training and SMME development' as a means to increase positivity. |
| | C | 2.10.2 | (Giampiccoli *et al.,* 2015) | |
| | IPAB | 8.2.2 | | |
| Revenue from tourism, park and local government | Chap 2 | 2.7.1.1 | (Lee, 2013; Mbaiwa & Stronza, 2010; Snyman, 2014) | This is amongst the tangible benefits in 2.7.1.1. It can include community levies, gate fees, rental of land from the community, donations, etc. |
| | IPAB | 8.2.2 | | 'Sustainable harvesting of natural resources for community use' is a tangible benefit in Chapter 2 and includes 'Control over natural resources'. While IPAB reveals access to natural resources as important, Nyaupane and Poudel's framework proposes less dependency on natural resources, and Salafsky and Wollenberg's model indicates the value of alternative livelihood options to reduce pressure on the environment. While the options proposed by these authors could be the best in some circumstances, in others, local people still need to derive livelihood from the land. Moreover, in some cases, deriving livelihood from wildlife and/or permitting local governance of resources can be very successful (Stone and Nyaupane, 2018). **PPWW thus indicates all three as possible options.** |
| • Sustainable usage of natural resources/ | Chap 2 | 2.7.1.1 | (Allendorf *et al.*, 2006; Rahman *et al.*, 2017; Stone & Nyaupane, 2018) | |
| • Sustainable community governance of natural resources/ | Chap 2 | 2.7.1.1 | (Stone & Nyaupane, 2018; Waylen *et al*., 2010) | |
| • Alternative trade-off's | C & C | 2.10.1 | (Nyaupane & Poudel, 2011; Salafsky & Wallenberg, 2000) | |
| Payment for conservation actions | Chap 2 | 2.7.1.1 | (Ferse *et al*., 2010; Sachedina & Nelson, 2010; Sommerville *et al*., 2010) | 'Payment for conservation actions' is a Tangible/direct benefit in Chapter 2 and refers to payments made to the community for undertaking defined conservation actions. A similar term is 'Payment for Environmental Services'. |
| Infrastructural development | C & C | 2.10.1 | (Nyaupane & Poudel, 2011) | 'Infrastructure/development' is a benefit in IPAB, but the differentiation into health, education and amenities is taken from Nyaupane and Poudel's (2011) framework. Section 2.7.1.1 included 'Community development projects' as a tangible benefit. Infrastructure, improved services and government support were included within this benefit. |
| • Education | Chap 2 | 2.7.1.1 | (Kohler & Brondizio, 2017; Mehta & Heinen, 2001; Swemmer *et al.,* 2017) | |
| • Health | | | | |
| • Amenities | IPAB | 8.2.2 | | |
| General community support | Chap 2 | 2.7.1.1 | (Mutanga *et al*., 2017; Swemmer *et al*., 2017) | In Chapter 2, this is a tangible benefit, e.g. loan of vehicle/tractor; donations of meat, wood, etc. for community events. In IPAB, 'General community support' is under 'Benefits', e.g. Phinda donating meat for community functions. |
| | IPAB | 8.2.2 | | |
| Resolved land rights (clear management arrangement) | Chap 2 | 2.4.3 | (Bezerra, 2018; Thondhlana *et al*., 2016) | These authors discuss the choices available to communities (under South African law) who win a land claim on a protected area. They explain the conflict that results, often because there is insufficient clarity on the co-management agreement. PPWW therefore includes 'Resolved land rights' (as well as the detail of how this will be managed and run). This is also applicable beyond the South African context. |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| **INTANGIBLE BENEFITS** | | | | |
| • Collective decision-making<br>• Collaboration<br>• Communication | Chap 2<br><br><br>C | 2.7.1.2<br><br><br>2.10.2 | (Niedziałkowski *et al*., 2018; Thondhlana *et al.,* 2016; Thondhlana & Cundill, 2017; Zhang *et al*., 2017)<br>(Brook *et al*., 2009; Garrod *et al.,* 2001 in Garrod, 2003) | 'Decision-making' is included as an intangible benefit within Chapter 2; and 'Collective decision-making' is one of the steps in the model by Garrod *et al.* (2001) (in Garrod, 2003). The 'Stool Model' contains 'Collaboration' as one of four critical supports. Communication emerges in several different sections of Chapter 2, and is a key feature of adaptive management (Torquebiau & Taylor, 2009). |
| • Information dissemination<br>• Interaction<br>• Participation | IPAB<br>Chap 2 | 8.2.2<br>2.6 | (Garrod, 2003; Simpson, 2008; Wali *et al.,* 2017) | IPAB mentions 'Lack of information' and 'Lack of interaction' as 'Losses'; and 'More information' and 'More involvement and interaction with PA' as means with which to increase positivity. In Chapter 2, 'Participation' is discussed extensively under 'Other factors' influencing attitudes and/or behaviour, but which authors have not classed as a benefit or loss. As this study draws to a close though, this researcher has earmarked participation as an intangible benefit since 'Other factors' has fallen away (See Section 7.4.7). |
| Education:<br>• General<br>• Environmental | Chap 2<br><br><br>IPAB | 2.7.1.2<br><br><br>8.2.2 | (Imran *et al.,* 2014; Kideghesho *et al*., 2007; Stem *et al.*, 2003; Waylen *et al*., 2010) | In Chapter 2, 'Opportunities to learn about the environment and tourism' is an intangible benefit. However, learning about tourism emerges less in the literature reviewed than environmental learning did. In addition, in IPAB, 'Environmental education' and 'General education' are 'Benefits', and 'More teaching about conservation and environment' and 'General education' are means to increase positivity. Therefore, PPWW only includes general education and environmental education as components. |
| Capacity building/empowerment | Chap 2<br><br><br>C | 2.7.1.2<br><br><br>2.10.2 | (Collins, 2016; Mbaiwa & Stronza, 2010; Saufi *et al.*, 2014; Stem *et al*., 2003)<br>(Giampiccoli *et al.*, 2015) | 'Learning new skills (capacity building)' is an intangible benefit in 2.7.1.2. Under schema that focus on the community, the 'Community-Based Tourism E-model' includes 'Empowerment'. |
| Business, management and leadership skills | Chap 2 | 2.7.1.2 | (Mbaiwa & Stronza, 2010; Stronza & Gordillo, 2008) | 'Personal growth in business, management and leadership' is an intangible benefit in 2.7.1.2. |
| Access for community to visit park as tourists | Chap 2<br>IPAB | 2.7.1.2<br>8.2.2 | (Lee, 2013) | Though barely found in literature, this is an intangible benefit in Chapter 2. IPAB mentions 'Visiting PA' as a 'Benefit' and 'More opportunities to visit reserve' as a means to increase positivity. Including this in a schema is novel. |
| Community custodianship of environment | Chap 2<br>IPAB | 2.6<br>8.2.2 | (Spenceley *et al*., 2016) | While hardly emergent in the literature, 'Responsibility towards the protected area' is included as one of the 'Other factors' affecting attitudes and behaviour towards the environment in 2.6. In this research, it was a clear finding, and IPAB therefore includes 'LC feel responsibility to protect PA' as a 'Facilitator'. Its inclusion within a schema is novel. |
| Intrinsic appreciation of nature | Chap 2<br><br><br>IPAB | 2.7.1.2<br><br><br>8.2.2 | Campbell *et al.,* 2007; Cobbinah *et al*., 2015; Gadd, 2005; Tessema *et al*., 2007; Thondhlana *et al*., 2016) | 'Intrinsic appreciation of nature' is an intangible benefit within 2.7.1.2; while in IPAB, one of the 'Facilitators' is that 'LC appreciate PA and importance of conservation'. |
| Improved social capital | Chap 2 | 2.7.1.2 | (Cetas & Yasué, 2017; De los Angeles Somarriba-Chang & Gunnarsdotter, 2012; Pretty & Smith, 2004) | 'Social capital' strengthens and empowers communities. It is discussed as an 'Intangible benefit' in Chapter 2. |
| Pride in cultural identity | Chap 2 | 2.7.1.2 | (Collins, 2016; Cobbinah *et al.,* 2015; Lee, 2013; Pfueller *et al.,* 2011; Stone & Nyaupane, 2018) | 'Heightened cultural identity, cultural activities, pride and self-esteem' is mentioned under 'Intangible benefits' in Chapter 2. |
| Cultural exchange with tourists | Chap 2 | 2.7.1.2 | (Lee, 2013; Stronza & Gordillo, 2008; Tolkach & King, 2015) | 'Chances to learn from and interact with people from other cultures/cultural exchange' is an intangible/indirect benefit in 2.7.1.2. |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| **OTHER INTERNAL INFLUENCES** | | | | These are not benefits, but influence people-park relationships and should hence form part of an integrated PPWW. |
| Build up trust over time | Chap 2 | 2.6 | (De Pourcq *et al*., 2015; Ferse *et al.,* 2010; Tolkach & King, 2015) | This is discussed under 'Other Factors' in 2.6. Good benefits may exist, but without trust built up over time, local people may not overcome their suspicion of external stakeholders, which can impact on relationships. |
| • Mitigate human-wildlife conflict<br>• Consider compensation schemes | Chap 2<br><br>IPAB | 2.7.2<br><br>8.2.2 | (Cobbinah *et al.*, 2015; Gadd, 2005; Ghoddousi *et al*., 2018; Infield & Namara, 2001)<br>(Gadd, 2005; Mutanga *et al.,* 2017; Nyaupane & Poudel, 2011; Pechacek *et al*., 2013; Snyman, 2012b). | 'Human-wildlife' conflict is a clear 'Loss' in the literature reviewed, causing negative attitudes towards conservation and/or negative behaviour. Section 2.7.2 also includes the importance of compensation schemes as mitigation. 'Fear of wild animals' emerged in this research, and is hence listed under 'Losses' in IPAB. |
| Acknowledge perception of losses and address them | IPAB | 8.2.2 | | IPAB includes the point of 'Acknowledge perception of losses and address these' as a solution to increase positivity. |
| Have local champions drive initiatives | C | 2.10.2 | (Brook *et al.,* 2009) | The 'Stool Model' of Brook *et al*. indicates the importance of local champions. In the present research, &Beyond was found to have success working alongside local champions (Section 6.2.1). If projects have a champion within the community driving it at grassroots level, but with support from other stakeholders, the chances of success are higher. |
| Incorporate local culture into design of tourism products and activities | Chap 2 | 2.6 | (Saufi *et al.,* 2014) | In 2.6, 'Exclusion of local symbols' is noted as a factor that negatively influences attitudes and/or behaviour. For the framework, however, it is turned into a positive aspect with incorporation of local culture into design, as a component that will assist in achieving a win-win scenario. The researcher has extended this concept to 'activities'. |
| Devolve power | Chap 2 | 2.7.1.2 | (Krűger, 2005; Lucas *et al*., 2008; Niedziałkowski *et al.,* 2018; Thondhlana & Cundill, 2017) | Devolution of power is discussed as an intangible benefit in 2.7.1.2. It entrenches communities as active partners, and can encourage pro-conservation attitudes and behaviour. |
| Equip staff with skills required to train, empower and interact with local people | Chap 2 | 2.7.1.2 | (Stoll-Kleemann, 2005) | This component arises in the context of staff needing to build capacity amongst local people (as an intangible benefit), and work closely with them. However, staff often lack the skills required and may themselves need training in order to work optimally with the community. |
| **BENEFICIATION PRINCIPLES** | | | | These principles need to be considered in conjunction with the tangible and intangible benefits included in PPWW. |
| Determine which benefits matter most to the community and optimise them | IPAB | 8.2.2 | | This is included as a solution in IPAB. |
| Offer mix of tangible and intangible benefits | Chap 2<br><br>IPAB | 2.7<br><br>8.2.2 | (Cetas & Yasué, 2017; Stem *et al*., 2003; Stronza & Gordillo, 2008) | In the introduction to the section on 'Benefits and losses/costs' (2.7), these authors note that a combination of tangible and intangible benefits is essential. In IPAB, this is included as a solution to increase positive attitudes. |
| Aim for equitable benefit distribution | Chap 2 | 2.7.1 | (Giampiccoli *et al*., 2015; Gurung & Seeland, 2011; Larson *et al.*, 2016; Scanlon & Kull, 2009) | In the introduction to the section on 'Benefits' in 2.7.1, the importance of equitable benefit distribution is briefly discussed. |
| Listen to community and provide choices regarding benefits | Chap 2 | 2.6 | (Harihar *et al*., 2015; Wali *et al.*, 2017) | Listening to the community regarding their specific needs, shaping benefits based on this, and providing choices to communities regarding benefits they would like to receive, is discussed under 'Other factors' (2.6) which can influence attitudes and/or behaviour. |
| Communicate all benefits to community | IPAB | 8.2.2 | | This is included as a solution to increase positive attitudes in IPAB. |

| LAYER/COMPONENT | ORIGIN | SECTION | CITATION/S | ORIGINAL CONTEXT AND EXPLANATION |
|---|---|---|---|---|
| • Be transparent and openly discuss benefit limitations<br>• Discuss expectations and realistic timeframes | Chap 2 | 2.6<br>2.7.1 | (Collins, 2016; Spenceley, 2008; Spenceley *et al.,* 2016)<br>(Thondlhana & Cundill, 2017) | This is first noted under 'Other factors' (2.6) in the context of being realistic regarding the benefits that can result from tourism. In 2.7.1 it is mentioned in the introduction to 'Benefits', where the principles that should apply to benefit distribution are being expounded. This component includes setting realistic timeframes and expectations, e.g. benefits may well be insufficient for large communities and those living further away. This should be openly acknowledged. |
| Link tourism to benefits:<br>• Use tourism income for benefits<br>• Communicate that tourism brings benefits | Chap 2<br>IPAB | 2.6<br>8.2.2 | (Gadd, 2005; Matarrita-Cascante *et al.,* 2010) | Section 2.6 includes 'The presence of tourism and using tourism to its full potential' as one of the 'Other factors' influencing pro-conservation behaviour. When locals recognise the value of tourism, it can lead to actual protective actions towards the environment. The element of the local community not linking tourism to benefits is a 'Detractor' in IPAB. In PPWW it is added as a component necessary for a win-win scenario – actively pointing out to communities the benefits realised through tourism. |
| Vertical two-way arrow running across all four layers, labelled 'Influence relationship' | | | | This arrow indicates that circumstances and activity in each layer will contribute to influencing relationship. While the final 'Outputs' layer focuses on the people-park relationship, what happens in this final layer could also feed back into preceding layers. For example, pro-conservation behaviour results in a better relationship and the environment improves. A healthier natural environment could contribute to a healthier tourism industry, thus bringing more tourists and more capacity for beneficiation, thus improving attitudes further, and so the cycle continues. |
| **4. OUTPUTS** | | | | The outputs layer suggests the outcomes that could be expected should enough of the above components be in place. |
| Green and peach coloured arrows in lower half of framework | Chap 2<br>C & C<br>IPAB | 2.5.1<br>2.5.2<br>2.10.1<br>8.2.2 | (See layer 3 above: 'Community beneficiation')<br>(Bennett, 2016) | **The support in literature for the progression from benefits to attitudes to behaviour is demonstrated under '3. Community beneficiation', earlier in this table.** Moreover, the progression from 'perceptions' to 'level of support for conservation' appears in Bennett's (2016) schema. Finally, IPAB indicates how benefits and losses influence relationship, and that through beneficiation and solutions to increase positivity, middle ground can be reached.<br>Hence, in PPWW, the researcher uses coloured arrows in the framework's lower half to indicate the following:<br>1. **Green** – When the community receives these benefits, it generates pro-conservation attitudes. The solid border on this arrow indicates that this is widely accepted. This in turn can generate pro-conservation behaviour. The dotted border of the arrow indicates that this link may not always be evident. The final green arrow indicates that this progression (for the community) results in a win-win situation.<br>2. **Peach** – The provision of these benefits by the other stakeholders, together with following the principles of beneficiation should result in a win-win situation. |
| Two-way arrow within the double circle | C & C | 2.10.1 | (Tsaur *et al.,* 2006) | This illustrates that the people-park relationship is an active two-way relationship. The community are not merely passive subjects receiving from the park. To achieve a win-win, this relationship needs to be dynamic, adaptive, interactive and have a balance of power. While the need for this type of relationship emerges clearly in this research, and while PPWW constitutes a holistic compilation of the components that play a part in this relationship – the concept of the two-way arrow comes from the adaptation by Tsaur *et al.* (2006:642) of Ross and Wall's (1999) framework. In PPWW, this two-way arrow is inserted within the two overlapping circles. |

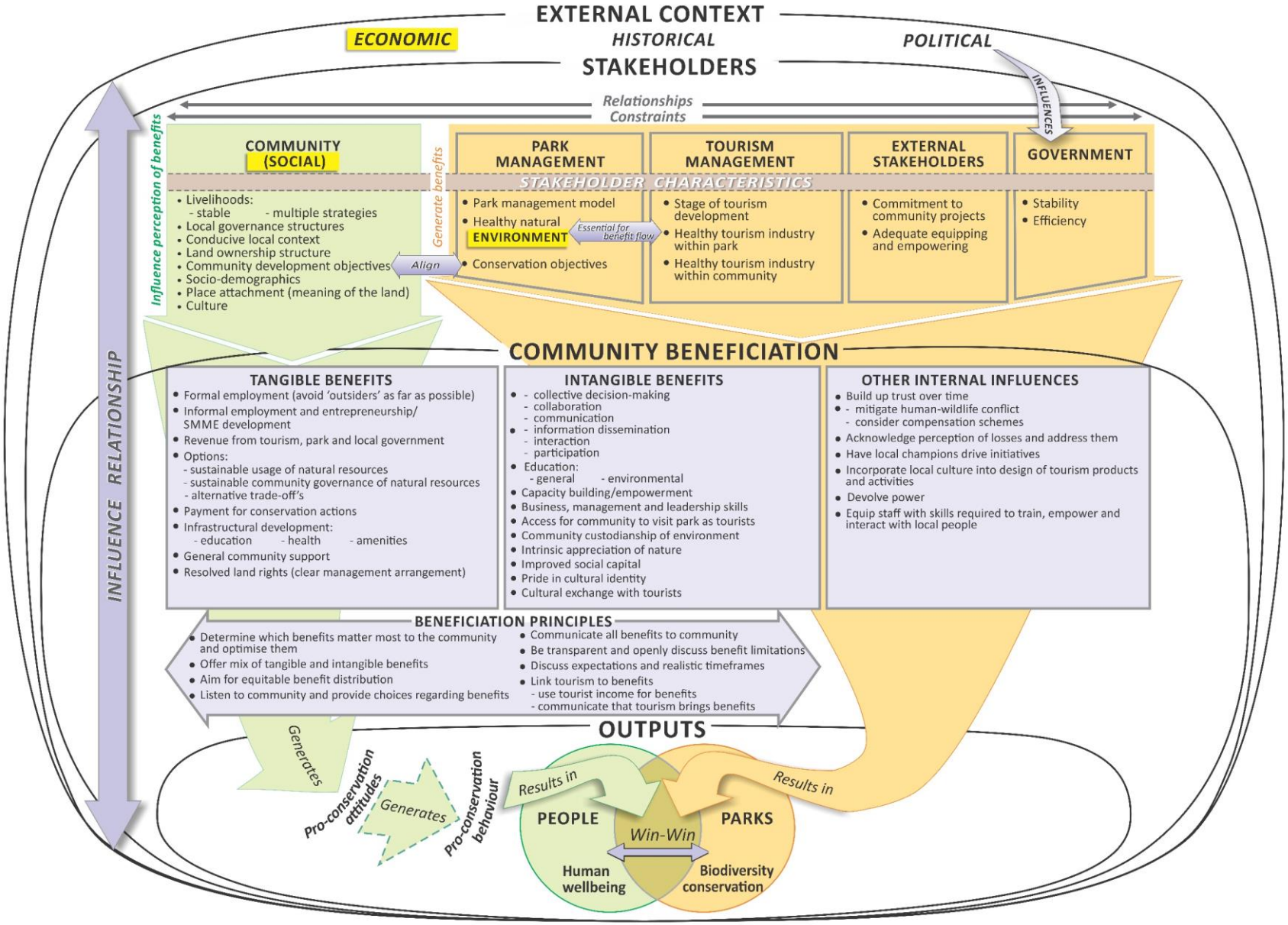



Figure 8.3: People Parks Win-Win Framework

### 8.4.2 The People Parks Win-Win Framework

The People Parks Win-Win Framework (PPWW) is an integrated schema focusing on the components that can influence people-park relationships. The framework provides a detailed overview of the different layers and the components within each layer, thereby aiding understanding. It can be used by stakeholders involved in the relationship between people and parks, serving as a practical tool to assist in achieving middle ground and a win-win situation both for communities and biodiversity conservation. Figure 8.3 presents the PPWW which was derived from the results of this study, from other schema and from existing literature. The origin of each component and layer is described in Table 8.2.

By considering the different influences on this relationship, the PPWW can assist in shaping protected area management strategies, and can be used for varying people-parks arrangements, ranging from benefit-sharing only, through to true co-management. The components of the PPWW do not operate in isolation nor as a complete package. It depends on the context of each protected area and its adjacent or resident community. Stakeholders need to adapt it to their context, but to take cognisance that all these components can impact on people-park relationships. Stakeholders also need to be aware that these relationships are complex, and no single framework can capture all impacting components in their entirety. While PPWW attempts to incorporate more influences than any other framework, users will still need to customise it to their particular context.

The PPWW is a significant departure from the other schema presented in Chapter 2. Considered cumulatively, it is a very unique framework for the following reasons:

- It is an attempt to be true to the components that emerged in this doctoral study via the primary research conducted and the secondary research consulted.
- Its arrangement is novel, as well as the detailed focus on beneficiation, and the principles to follow in benefit distribution.
- PPWW incorporates more stakeholders and indicates that all can be involved in beneficiation, and that their relationships will affect the achievement of a win-win scenario.
- The characteristics of the stakeholders are included, since these have a considerable influence.
- Much research emphasises biodiversity conservation, with improvement of community wellbeing coming a clear second. For true win-wins, the human dimension cannot be neglected, and is therefore infused within the framework.
- It concludes with an ‘Outputs’ layer, which indicates how the preceding layers and components can culminate in the provision of benefits by stakeholders; and the responses this can evoke in community members – leading to pro-conservation attitudes and behaviours, and ultimately to a successful relationship between the people and the park. Furthermore, what takes place in this final layer can feed back into preceding layers, creating a positive cycle.
- The centrality of relationships in the framework is also different to other schema.

Finally, for practitioners who would prefer a simplified framework, more akin to a blank slate on which they can superimpose their own characteristics, benefits, influences and beneficiation principles, Figure 8.4 provides the Simplified People Parks Win-Win Framework.

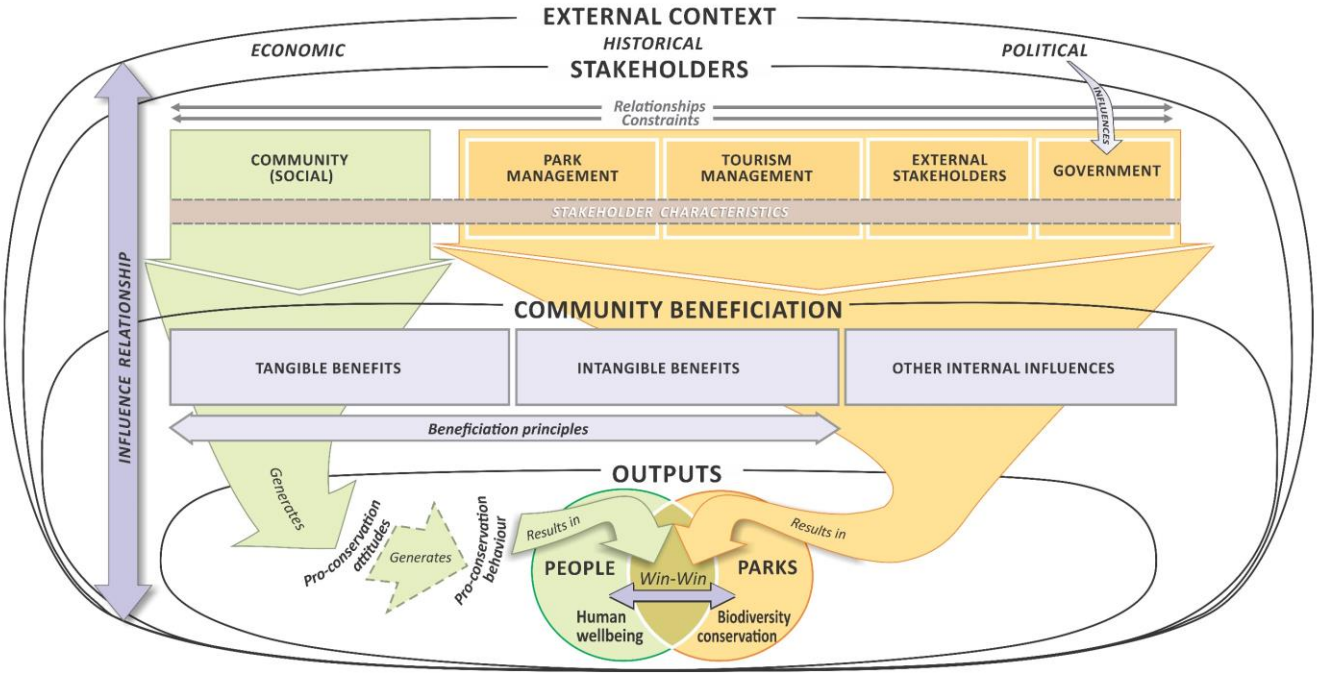



Figure 8.4: Simplified People Parks Win-Win Framework

## 8.5 Chapter 8 summary

The meta-themes which emerged from Chapter 7's cross-case analysis of the three case studies were used to construct the theory and develop the guidelines. Hence these contributions of the study are based purely on primary data. RO 7.1 set out to construct a theory to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions giving rise to pro- or anti-conservation attitudes and behaviour. The resulting middle-range substantive theory is introduced, together with its link to the research design of this study. The theory is then explained, followed by its diagrammatic representation. Comparison to existing schema that attempt to represent the community and conservation area; and schema that focus on the community only, then takes place. A defence against 'theory pretence' is also included. In the conclusion to RO 7.1, the value and uniqueness of the theory is laid out.

RO 7.2 aimed to develop recommendations for implementation of the theory for both the communities and the managements of protected areas, in order to facilitate a positive relationship, aiming for improved achievement of the dual goals of biodiversity conservation and community wellbeing. The set of recommendations for community members is unique, and its presence in this thesis acknowledges

the vital role that the community plays in the relationship between people and parks, which if positive can lead to a synergistic win-win for the environment and people. Due to the theory and recommendations being data-driven, they are highly applicable to the three case studies. Other communities and protected area management can, however, adapt them to suit their particular contexts. The theory and guidelines are the result of the third level of analysis and interpretation as per the 'Research process' in Figure 1.3.

The IPAB Theory revealed that relationships are key to influencing pro-conservation attitudes and behaviour. Therefore, to draw the study to a close, the people-parks relationship takes centre stage in RO 8, which was to develop a comprehensive integrated framework representing the components that can influence people-park relationships. This final research objective also broadens the applicability of the study by combining the results of this research with that of previous studies. Each layer and component of the framework was first set out within a table to provide its origin, context and any adaptations that were made to it or explanations required. The People Parks Win-Win Framework was then presented, followed by an explanation of its use and uniqueness. Finally, a simplified version of the framework was also provided. Producing the framework formed the fourth layer of analysis and interpretation as per Figure 1.3. Achieving Research Objectives 7.1 and 8 also included the third and fourth stages of literature comparison respectively.

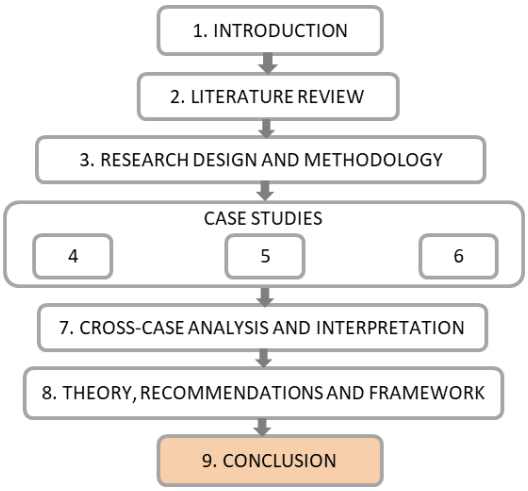
Win-wins involve a complex process with negotiations between different stakeholders with different agendas, and clarity in planning as well as implementation. With commitment from government, conservation agencies, and other stakeholders; as well as informed realistic expectations from local communities and recognition of their role and responsibilities, there is potential for tangible and intangible benefit provision within a healthy context. This can foster positive attitudes which lead to pro-conservation behaviour and instil a robust relationship between park staff and the people living nearby. The alternative of not investing in this crucial relationship and not ensuring a healthy sustainable flow of benefits could result in significant losses on both sides, with the final score being lose-lose.

# Chapter 9

# Conclusion

*"The single biggest threat to our planet is the destruction of habitat and along the way loss of precious wildlife. We need to reach a balance where people, habitat, and wildlife can co-exist – if we don't, everyone loses … one day."*

(Steve Irwin)




## 9.1 Introduction

The research question in this study was "What are the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas, from the perspectives of both the local communities and reserve staff, and how can these be optimally represented?". The aim of this research was to identify, investigate and represent the influences on pro-conservation attitudes and behaviour in local communities bordering protected areas. This was done via a research design entailing three contrasting case studies in South Africa using a variant of grounded theory.

The need for this study is encapsulated in the overarching research gap laid out in Section 1.2. The gap identification revealed that a crucial need exists to achieve both biodiversity conservation and improved wellbeing for communities bordering protected areas. Yet this is dependent on the attitudes and behaviour of local people, and there is limited knowledge regarding the influences on attitudes and behaviour. Moreover, although the relationship between protected area management and the local community is vital, limited theory exists on this matter. These gaps in knowledge can make it difficult to achieve the dual goals of conservation and human wellbeing, i.e. the attainment of middle ground between protected areas and local people.

To answer the stated research question and achieve the aim, eight research objectives were formulated. The chapter will first revisit their achievement as described in preceding chapters. It then reflects on how the research gaps identified at the start of the study (which gave rise to this research) have been addressed, followed by the achievement of the research question and aim. The key contributions of this research are then considered, as well as the shortcomings and limitations of the study and implications for future research. The final section concludes the chapter and thesis. Figure 9.1 presents the chapter layout.

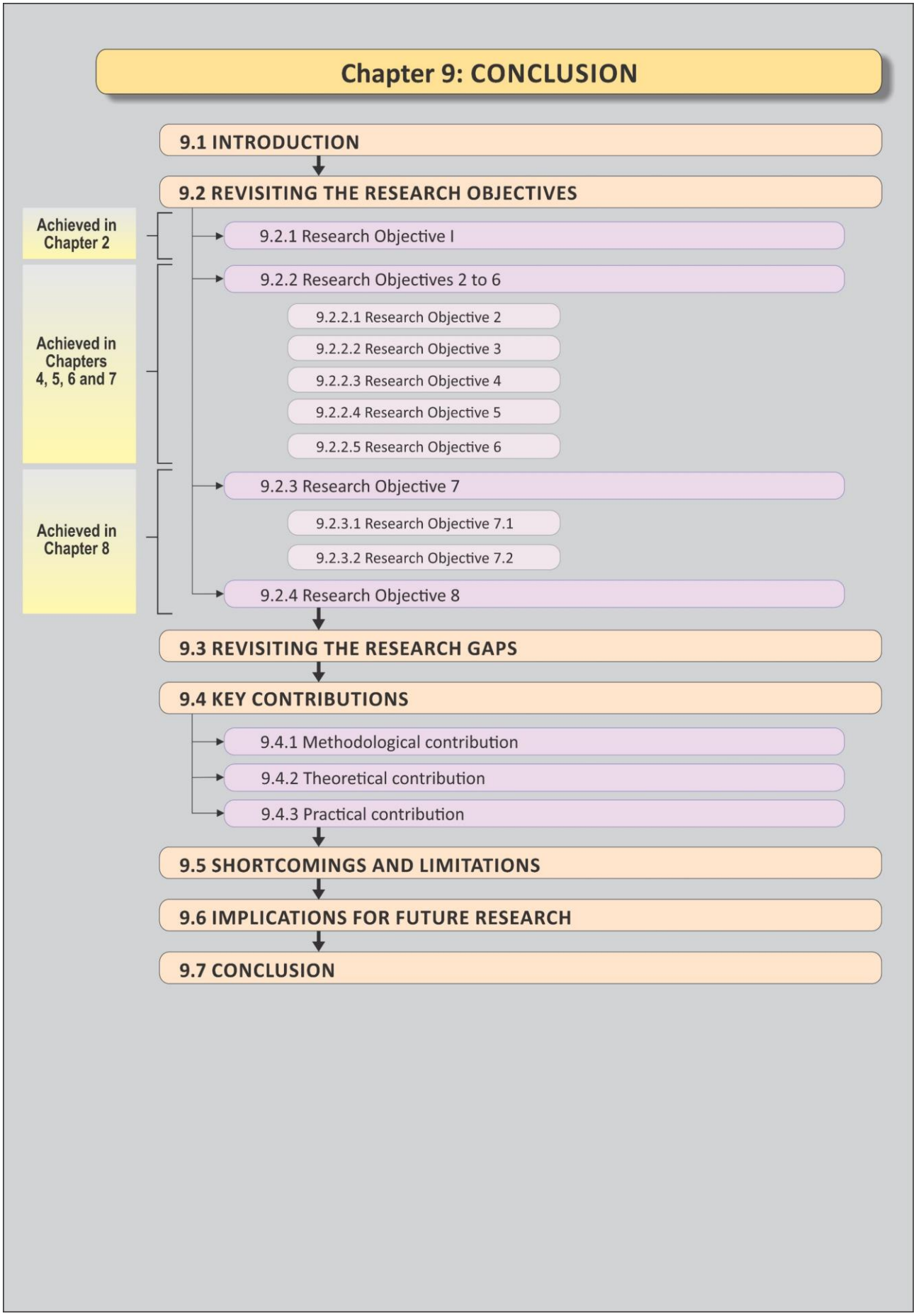



Figure 9.1: Chapter 9 layout

The research was situated in the paradigms of constructivism/interpretivism, recognising that participants have multiple subjective views, which can be discovered and explored through interaction with each other and with the researcher (Bann, 2001; Creswell, 2014). The combination of an adapted form of grounded theory and a case study research design; the creative blend of research methods employed; the use of two different constituencies; and the research process followed to analyse, interpret and reduce the data – in order to address the research objectives – epitomise the pragmatic paradigm followed by the researcher (Cohen *et al*., 2011; Creswell & Poth, 2018; Saunders *et al*., 2009).

The research process is depicted in Figure 1.3. Chapter 2 demonstrated scholarly engagement with relevant phenomena, and attempted solutions and existing schema in the field of communities and conservation, firmly contextualising the need for this research based on existing knowledge. To continually reflect on how the findings of this research compared and contrasted with existing knowledge, four stages of literature comparison were conducted. Sound analysis and interpretation was followed through a pragmatic research design which involved four layers of analysis and interpretation to arrive at the conclusions presented in this chapter.

While the problems identified in the research gaps are global challenges, this research focused on South African case studies. It attempted to contribute to adaptive management by identifying the components required to achieve middle ground win-win solutions between local people and neighbouring parks, so that community wellbeing improves and biodiversity is conserved. In the various National Environmental Management Acts, the South African government has also highlighted the dual achievement of people wellbeing and park conservation, and the participation of communities in this. It is interesting that, when comparing the NEMPA Act and NEMBA of 2003 and 2004 respectively to the more recently released 'Norms and Standards for the Management of Protected Areas in South Africa' (2016), the responsibilities placed on protected areas to improve human wellbeing are far more evident. These include community welfare, development, education, communication, natural resource usage, access to land and long-term economic benefits (Section 2.3).

At the same time, protected area management face very real constraints in terms of budgets and the number of staff that they have, who need to achieve a multitude of tasks. Moreover, for private game farms, which are key components of biodiversity conservation in South Africa, the current land debate rages, and threat of expropriation without compensation looms. Hence, creative realistic win-win strategies are essential, where communities benefit from the wildlife on their doorstep and are part of its conservation. In the South African context, there has never been a more pertinent time than now to address these issues.

## 9.2 Revisiting the research objectives

This section considers the achievement of the eight research objectives which were the means of achieving the research aim, answering the research question and bridging the research gaps. Table 9.1 indicates the sections within the study where each research objective was addressed.

Table 9.1: Research objectives with corresponding locations in thesis

| | Research Objective | Location in thesis | |
|---|---|---|---|
| | | Chapters | Sections |
| RO 1 | To review literature regarding the influences on pro-conservation attitudes and behaviour. | 2 | All |
| RO 2 | To probe the knowledge and experiences of community members regarding the protected area. | 7 (4,5,6) | 7.2 |
| RO 3 | To seek to understand the relationship between the local community and the protected area. | 7 (4,5,6) | 7.3 |
| RO 4 | To identify the benefits received and losses/costs incurred by the local community due to the presence of the protected area, as well as other factors that could influence the attitudes and behaviour of the community towards the protected area. | 7 (4,5,6) | 7.4 |
| RO 5 | To explore the responsibilities of the community towards the protected area and the responses these evoke. | 7 (4,5,6) | 7.5 |
| RO 6 | To discover what could be done differently in future in order to improve the positivity of the local community towards the protected area, and to improve future relationships. | 7 (4,5,6) | 7.6 |
| RO 7.1 | To use the data derived from this study to construct a middle-range substantive theory that attempts to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions that give rise to pro- or anti-conservation attitudes and behaviours. | 8 | 8.2 |
| RO 7.2 | To use the data derived from this study to develop recommendations for implementation of the theory for both the communities and the managements of protected areas, in order to facilitate a positive relationship, aiming for improved achievement of the dual goals of biodiversity conservation and community wellbeing. | 8 | 8.3 |
| RO 8 | To develop a comprehensive integrated framework representing the components that can influence people-park relationships. | 8 | 8.4 |

### 9.2.1 Research Objective 1

**RO 1: To review literature regarding the influences on pro-conservation attitudes and behaviour**

Research Objective 1 was achieved in Chapter 2. In line with adapted grounded theory, the initial literature review in Chapter 2 guided the development of the research design and research instrument, but was put aside 11 months prior to the start of data collection. After the write-up of results from primary data, the literature was revisited, to take more recent research into account. In order to clearly demarcate the original literature (which, in line with adapted grounded theory was used to provide

multiple lenses, but not to force the research into preconceived categories) from the newer literature, a blue font was used for the new sources. The literature discussed in Chapter 2 is contrasted with the findings of this study in Chapters 7 and 8.

The literature drew from a wide range of topics and sources from different fields. The researcher consulted various sources (Government Acts, books, news articles, journal articles) emanating from the fields of social psychology; pro-environmental behaviour; tourism studies; environmental studies; development and social studies; and protected areas/biodiversity conservation and local communities. The literature regarding conservation and communities incorporated different combinations of the following topics: attitudes, behaviour, benefits, participation, poverty reduction and natural resource management, and different approaches. In addition, articles covering research worldwide were included.

The extensive range of literature consulted, enabled the researcher to consider the topics in a new way. The researcher has not found evidence of an in-depth focus on tangible and intangible benefits, as well as losses, covered in the literature, as has been produced in this study. Furthermore, as part of the process to develop a comprehensive framework that represents the influences on the people-park relationship, the investigation of current schema relating to communities and conservation has not been conducted. Finally, the literature review summary at the end of Chapter 2 is a novel attempt to summarise the influences on pro-conservation attitudes and behaviour (as found in literature) within a single diagram.

### 9.2.2 Research Objectives 2 to 6

Research Objectives 2, 3, 4, 5 and 6 were ultimately achieved in the cross-case analysis of Chapter 7, which formed the second layer of analysis and interpretation in this study. However, the first layer of analysis and interpretation, which took place within the case study chapters (Chapters 4, 5 and 6), constituted an important forerunner in achieving these objectives. For each of these research objectives, the researcher drew from the findings of the case study chapters. Hence, for the individual reserves and communities, the research objectives were addressed in these chapters. The orientation tables at the start of each question within Chapters 4, 5 and 6 referred the reader to the relevant research objective. Some research objectives entailed more than one question.

In Chapter 7, following a discussion of the cumulative findings from three contrasting case studies, meta-themes were identified, which encompassed the most important issues relevant to the influences on pro-conservation attitudes and behaviour (summarised in Table 7.3). These meta-themes were then compared with the literature in Chapter 2, to determine how the results of this research confirmed, conflicted with or were complementary to existing knowledge. They then formed the building blocks to achieve the theory and provided the source for the recommendations within Research Objective 7.

Research Objective 8 built on Research Objective 7 – by combining the theory with existing literature, the framework was developed. The next sections briefly reflect on the achievement of Research Objectives 2 to 6.

#### *9.2.2.1 Research Objective 2*

**RO 2: To probe the knowledge and experiences of community members regarding the protected area.**

Research Objective 2 was explored in Section 7.2. This objective related to C1 only, and within each case study, the data were gathered by means of a map-drawing exercise and two questions addressed in the focus group interviews. The two questions comprised several parts, and respectively investigated participants' knowledge of what was inside the reserve and what one could do there; and participants' experiences in terms of who had entered the reserve, how often, activities undertaken, and the feelings evoked by these visits. Findings emphasised that participants appreciated the reserve, acknowledged that nature was the focus, and desired environmental education relating to the reserve. Existing literature has also identified an appreciation of the reserve.

The importance of environmental education as an influencer of attitudes and behaviour is discussed by several scholars. However, the strong desire on the part of the community for environmental education, that emerged in this study, was not found in the literature. Therefore, while each reserve does have some programmes in place, protected area management are advised to invest more time and resources into environmental education. Another request from C1 was for information regarding the reserve. While these questions aimed to probe existing knowledge and experience of the reserve, participants also used the opportunity to demonstrate a gap in their knowledge, which could be filled through further environmental education and reserve-specific flow of information.

Knowledge of the reserve was shown to improve in cases where participants had visited the reserve, particularly if they had entered for leisure, as occurred at Mkhambathi. All participants who entered a reserve had highly positive attitudes regarding the experience, some attesting to it being life changing. In the literature reviewed, the researcher only found evidence of a similar finding in a developed area of Taiwan (Lee, 2013). This finding in the context of rural and peri-urban communities is novel.

A further finding was that Phinda participants, when contemplating their knowledge and experience of Phinda, acknowledged that they experienced a good relationship with the reserve. Finally, attitudes relating to natural resource access were found to be linked to historical contexts, and this was confirmed in the literature reviewed.

Viewing these results holistically, it is important for reserve management to note that participants want to feel part of the reserve – via access as visitors, environmental education regarding the reserve, and information on the reserve. Furthermore, all these experiences promote increased knowledge of the reserve. Knowledge and personal experience of the reserve thus appear vital in influencing attitudes towards the protected area; and influencing the relationship between the community and the reserve.

#### *9.2.2.2 Research Objective 3*

**RO 3: To seek to understand the relationship between the local community and the protected area**

The achievement of Research Objective 3 was discussed in Section 7.3 and addressed via two questions. The first question was asked to both C1 and C2 via the focus group interviews and individual interviews respectively, and related to participants' perceptions of the people-parks relationship. The second question, asked to C1 only in the focus group sessions, related to other peoples' views of the nature reserve (what friends and family thought about the reserve).

Findings indicated that C1 were appreciative of nature and realised the importance of conservation. Both C1 and C2 recognised that a good relationship resulted in decreased rates of poaching (i.e. an actual behaviour), a finding confirmed in the literature reviewed. However, a new finding, particular to this research, was that C1 were unlikely to report poachers who were poaching due to hunger. This raises questions concerning reporting and punitive structures. Recommendations in this regard are made in Section 8.3 of Chapter 8.

The people-parks relationship also appears to be affected by historical context, which influences the expectation of benefits. Hence, reserve managers in situations where the adjacent community does not have historically-induced expectations, may have a simpler task in building a good relationship. However, in the case of the fairly new Kekana Gardens community outside Dinokeng, benefits are still expected, but appear to be centred around communication, information and interaction. In the case of natural resources as a benefit, the case of Phinda/Mnqobokazi appears to demonstrate that, if sufficient new benefits prevail, communities may be quite willing to forego access to natural resources, even if access was historically the case. In the case of Mkhambathi/Khanyayo, locals harvest thatch grass, which is perceived as a considerable benefit, positively influencing attitudes towards the reserve, and the people-parks relationship.

The achievement of Research Objective 3 also revealed aspects that communities wanted, which emerged when they reflected on the people-parks relationship. These were information dissemination, employment and access to natural resources. Lack of the latter two lead to negative attitudes towards

the protected area, and this is confirmed by other scholars. Information as an influence on relationship, however, did not emerge in the literature reviewed. Communication in the context of the people-park relationship is mentioned by scholars, but not basic information dissemination regarding a particular protected area. It thus appears that this is a missed opportunity, which can be a relatively simple and inexpensive way for reserve management and staff to improve the relationship.

Finally, results for Research Objective 3 indicated that C2 are more aware of initiatives/programmes that improve the relationship between the community and the reserve, than C1 are. Furthermore, C2 were more positive about the relationship than C1. This non-alignment between C1 and C2 has implications on the relationship. Recommendations regarding this were made in Section 8.3.2 and include the need for C2 to actively 'market' the programmes that constitute benefits for local people. Excellent programmes may exist, but if the community are unaware of these, opportunities to improve the relationship are being lost.

A key finding emerging towards the end of this research was that the concept of 'relationship' constituted far more than being merely one aspect that influenced pro-conservation attitudes and behaviour. In fact, the aspect of relationship was not even one of the phenomena that shaped this study (Figure 2.2). As explained in Section 8.2.2, the data revealed that knowledge and experience of the reserve; benefits received and losses incurred; other influencing factors; and C1's sense of responsibility towards the reserve, all impacted on relationship. Hence relationship between the protected area and local community is pivotal to an understanding of pro-conservation attitudes and behaviour. Aspects that influence pro-conservation attitudes and behaviour also shape the people-parks relationship.

Seeking to understand the relationship between the local community and the protected area has revealed a multi-faceted association, which extends beyond Research Objective 3. This relationship is influenced by the historical context; and a good relationship appears to depend on benefit provision, with information dissemination, environmental education and access to natural resources emerging within this research objective. While communities appreciate the nature reserve and acknowledge the importance of conservation, they also link decreased poaching to a good relationship. The centrality of the people-parks relationship is indicated in the IPAB Theory (Section 8.2.2) and the PPWW Framework (Section 8.4.2) by all components being embedded within 'Relationship'. In IPAB, relationship is shaped by the benefits, losses, detractors and facilitators. Similarly, PPWW indicates how the circumstances and activity in each layer will shape this relationship. While the final 'Output' layer of PPWW focuses on the people-park relationship (via the two intersecting circles), what occurs in this final layer can also feed back into preceding layers. For example, pro-conservation behaviour could also contribute towards a better relationship, and the environment improves due to custodianship on the part of the community. A healthier natural environment could contribute to growth in tourism, thus resulting in more benefits, and a positive cycle, which could further improve attitudes, and so on.

### *9.2.2.3 Research Objective 4*

**RO 4: To identify the benefits received and losses/costs incurred by the local community due to the presence of the protected area, as well as other factors that could influence the attitudes and behaviour of the community towards the protected area**

Research Objective 4 was achieved in Section 7.4 and encompassed two questions, which each in turn included two questions. The questions on how the reserve had changed the way of life (positively and negatively) were asked in the focus group interviews for C1 and in the individual interviews for C2. The questions on the benefits gained and the losses/costs incurred due to living near a nature reserve, were dealt with using adapted nominal grouping technique (NGT) for C1 and individual interviews for C2.

#### *(a) Positive changes and benefits*

Most of the meta-themes emerging in Section 7.4.2 related to actual benefits received (summarised in Table 7.3). Information dissemination as a benefit featured again, as well as access to the reserve as a visitor (a distinct finding of this study as explained in Section 9.2.2.1), and access to natural resources. Literature confirms the latter as important, with some scholars advocating for control over natural resources. The various options regarding natural resources are captured within the PPWW Framework (Section 8.4.2). This study also found that community members viewed it as a benefit when natural resources which they valued (such as thatch grass), were conserved due to being in a protected area. This finding is confirmed in literature. Employment was another important benefit confirmed by many scholars. Some mention that it results in pro-conservation behaviour. The present research, however, did not confirm this link, but certainly found that employment resulted in positive attitudes towards the conservation area. Infrastructure and general support to the community (such as donation of meat at Phinda for community functions) were also benefits, and align with the research of others. Two forms of education surfaced as benefits to the community. Firstly, environmental education, which has been mentioned in Sections 9.2.2.1 and 9.2.2.2; and secondly, general education. Interestingly, the latter does not emerge strongly in the literature reviewed. However, based on a few recent studies in Africa, as well as on the results of this study, it appears to be a vital benefit in the African context (Section 7.4.3). Relating to the marked absence of the mention of tourism as a benefit provider, a conclusion was reached that participants are either not seeing the link between tourism and benefits; or tourism-related benefits do not reach them.

An interesting finding was that the participants from the community receiving the most benefits mentioned fewer specific benefits received, than the participants from communities who actually received fewer benefits. This could be ascribed to this community (Mnqobokazi) being used to the benefits received or having higher expectations. As emerged in Section 9.2.2.2, C2 are more aware of programs and initiatives which benefit the community, than the C1 participants themselves were, emphasising again the value of ‘marketing’ the benefits available to the community. Finally, a vital

conclusion relates to the importance of reserve management offering a mix of tangible and intangible benefits. While focus often tends to be on the tangible (particularly employment), this research reveals the crucial importance of a range of intangible benefits to participants. These intangibles are often simpler to implement, and a sustainable combination should therefore be offered, within the very real constraints faced by protected areas. This finding was mildly evident in the literature consulted but emerged strongly in this research.

***(b) Negative changes and losses***

The integration of negative changes and losses, as encapsulated by the meta-themes in Section 7.4.5 and as summarised in Table 7.3, revealed that lack of access or limited access to the reserve as visitors, as well as insufficient employment, causes negative attitudes. Fear of wild animals is a significant loss. Generally termed 'human-wildlife conflict', this constitutes the most commonly cited loss in literature. Scholars also discuss compensation schemes as being important. Lack of access to natural resources is an important loss, already discussed in Section 9.2.2.2 as a cause of negative attitudes. Some scholars take this further, linking it to behaviour by community members that is detrimental to the environment. For Dinokeng, lack of information/interaction arises as a loss. Information has surfaced previously, but here interaction between people and the park is also shown to be important, an aspect which is confirmed in the literature as being critical for success. Finally, the importance of historical context as an influence on the expectation of benefits and the identification of losses is apparent again under Research Objective 4.

***(c) Closure to Research Objective 4***

Research Objective 4 set out to identify benefits, losses and other factors that could influence attitudes and behaviour. Section 7.4.7 concludes that enquiring about positive and negative changes (in addition to benefits and losses) did assist in addressing this objective. Several positive changes emerged, which were predominantly classed as intangible benefits; and new points surfaced under negative changes, which were classed as losses.

The ranking of benefits and losses is distinct to this study (Section 7.4.1.2 and Table 7.1; Section 7.4.4.2 and Table 7.2). The research method of adapted NGT made ranking possible, and revealed which benefits and losses mattered most to participants. Furthermore, with benefits, the differences in ranking between C1 and C2 revealed crucial areas of non-alignment, which can now be rectified. A further finding was that, while there were a few similarities, the main benefits and losses at each reserve were predominantly different. Protected area management were also more aware of positive initiatives than the community. These findings emphasise the importance of each protected area undertaking this exercise, as this awareness will enable the optimisation of top ranked benefits, rather than expending resources and time on benefits that are less important or unimportant to C1. If it is the case that the community are unaware of these initiatives, then 'marketing' these becomes important. This awareness can also, where possible, assist in addressing and alleviating the top ranked losses, and in assisting

protected area management to pinpoint reasons for lack of support for conservation. In addition, considering that benefits and losses may differ significantly from one park to another, Section 8.4.2 stresses the need for stakeholders to adapt and customise the PPWW to their particular context.

In other comparisons between C1 and C2, it surfaced that C1 acknowledged far more losses than C2. C2 thus need to acknowledge what C1 perceive as losses and address the issue via environmental education, awareness and information provision. It was encouraging, however, to find that both constituencies in all three reserves recognised more benefits than losses. Striving to align the perceptions of C1 and C2 regarding benefits and losses, could positively impact pro-conservation attitudes, behaviour and the overall people-park relationship.

#### *9.2.2.4 Research Objective 5*

**RO 5: To explore the responsibilities of the community towards the protected area and the responses these evoke**

Research Objective 5 was realised in Section 7.5. It involved one question with two parts – whether the community had any responsibilities regarding the reserve, and how they felt about these. For C1, this question was addressed in the focus group interviews, and for C2, in the individual interviews.

The findings revealed that communities did indeed have a range of responsibilities, some of which were self-imposed. A valuable finding was that C1 either actively protected the reserve or wanted to play this role. Inclusion as custodians resulted in positive pro-conservation attitudes and actual positive behaviour towards the protected area. Conversely, a sense of exclusion as custodians caused negative attitudes. Furthermore, of interest is that this sense of responsibility was not always recognised by C2. In the light of this finding, custodianship should be actively encouraged by C2. The researcher could find no reference in literature to the importance of custodianship by local people, except for Spenceley *et al.* (2016) who refer to it as a driver of success in community-based tourism.

Several findings related to poaching. It emerged that C1 had a real fear of reporting serious poachers and were reluctant to report minor offences. A good relationship together with benefits appears to decrease poaching, hence affirming the importance of beneficiation and the centrality of the people-park relationship. In the literature of Chapter 2, only Stone and Nyaupane (2018) link these two to decreased poaching. Considering the dearth of literature regarding the linkages between poaching, benefits, losses and relationship, these are valuable findings.

C1's appreciation of nature and the importance of conservation arises again here, together with their desire to learn about the environment for the purposes of understanding their role in, and impact on the reserve. Hence, this is not learning for the sake of learning, but learning in order to equip themselves

with the knowledge required to play a positive role regarding conservation. This is another important finding, which the researcher only found in one other source, namely Hill *et al*. (2015:176) who found that residents in the El Vizcaíno Biosphere Reserve in Mexico had high levels of concern regarding the management of environmental protection and wanted to be informed so that they could "care for the area".

Finally, the importance of a secure boundary between the reserve and the community featured. If C1 were insecure regarding the boundary, it increased their fear of wild animals and negatively affected their sense of responsibility towards the protected area.

These are predominantly positive findings which have implications for protected area management. Very few authors highlight responsibility as an influence on pro-conservation attitudes and behaviour. Yet, these findings are clear – C1 desire this responsibility and it positively influences pro-conservation attitudes and behaviour. For long-term biodiversity conservation, C2 should actively encourage and support C1's custodianship of the environment.

#### *9.2.2.5 Research Objective 6*

**RO 6: To discover what could be done differently in future in order to improve the positivity of the local community towards the protected area, and to improve future relationships**

This research objective involved two questions and was accomplished in Section 7.6. The question on what would make the community more positive towards the reserve in future was asked to C1 in the focus group interviews and to C2 in the individual interviews. The question where participants were asked to verbalise their dreams for an ideal future for both people and the park, was dealt with after the NGT, when both focus groups were together (for C1) and via the individual interviews (for C2).

Several aspects emerged that could improve positivity towards the reserve, and the people-park relationship. These include employment, general education, information (its repeated occurrence highlighting it as a crucial finding), visiting the reserve, not employing non-locals (Dinokeng), and development/infrastructure (Mkhambathi). Involvement/interaction was a further positivity builder, with evidence that it assists locals in understanding the reserve/conservation and the benefits received, increases a sense of ownership, and improves the relationship. The significance of this benefit was also clear in the literature reviewed. In addition, participants indicated that skills training and SMME development improve positivity. While scholars in Chapter 2 recognised the importance of this, they did not make the link to positive attitudes. Specific to Phinda, the request for more management positions was noted as an aspect that would foster positive attitudes. This is not clearly evident in the literature, but would be relevant to co-management and power-sharing arrangements between local communities and protected areas.

Finally, C2 in all three cases indicated clear intentionality to uplift the community; and viewed community projects more as dreams and positivity builders than C1 did. The latter finding has emerged previously, reiterating the need for C2 to stress these programmes, so that C1 view them as benefits emanating from the reserve.

This research objective has clearly discovered several aspects that could be implemented by reserve management and relevant stakeholders to improve positive attitudes in future.

### 9.2.3 Research Objective 7

#### *9.2.3.1 Research Objective 7.1*

**RO 7.1: To construct a middle-range substantive theory that attempts to explain the influences on pro-conservation attitudes and behaviour; and that specifies the conditions that give rise to pro- or anti-conservation attitudes and behaviours.**

Research Objective 7.1 was achieved in Section 8.2 and constituted the third layer of analysis and interpretation. It used the meta-themes from Chapter 7 (which were based on the findings from the three cases) as building blocks to construct a data-derived middle-range substantive theory. The research design which involved case studies and a variant of grounded theory, led to the production of a theory (Darke *et al.*, 1998) which was represented schematically.

The IPAB Theory contains various sections. 'Relationship' is central to IPAB, since the study revealed that elements influencing the people-park relationship also influence pro-conservation attitudes and sometimes pro-conservation behaviour. Within the 'Relationship' frame of IPAB are the benefits, losses, detractors and facilitators. Benefits do increase positive attitudes towards the protected area, for example, visiting the protected area and being employed. While pro-conservation attitudes emerged more easily than pro-conservation behaviour, each case study showed evidence of actual behavioural actions that were positive to the protected area, such as protecting the boundary wall; and reporting escaped animals, fires and suspicious behaviour. Losses too result in negative attitudes, for example, lack of information, limited access as visitors or insufficient employment. Some links between negative attitudes and behaviour emanated from the data, for example, lack of information and distrust of the boundary fence negatively impacts on the community's sense of responsibility and the actions they will or will not take to protect the reserve. Furthermore, 'Facilitators' were included, which are not benefits, but which emerged from the data as positive elements relevant to the relationship and the nurturing of pro-conservation attitudes and behaviour. In contrast, 'Detractors' detract from a good relationship and the fostering of pro-conservation attitudes and behaviour.

Moreover, the theory includes sections containing solutions to increase positive attitudes, based on the voices of the participants. It also contains various relational links. The output section of IPAB involves two interlinking circles, which have featured throughout this thesis. Once the relationship has been assessed and interpreted by staff in protected areas (optimising benefits and understanding facilitators; and minimising losses and understanding detractors), and solutions to increase positivity have been harnessed – this should result in positive middle ground between the park and the people. This positive middle ground implies enhanced pro-conservation attitudes when compared to previous situations, and resultant pro-conservation behaviour, because community wellbeing is being improved.

Considering the above, for the cases in this study, IPAB does explain the influences on pro-conservation attitudes and behaviour and what gives rise to pro- or anti-conservation attitudes or behaviour.

In addition, within this research objective, the theory was also compared to existing schema in Section 8.2.3. This exercise revealed that, while a few similarities exist, IPAB has a unique focus and contrasts to other schema in terms of its focus, structure and elements. This demonstrates the value of using grounded theory, in this case a variant of grounded theory. To strengthen its value further, a brief defence of the theory in Section 8.2.4 justifies its existence as a theory, in this case a middle-range substantive one. Regarding the use of the theory, generalisability cannot be claimed beyond the three case studies, but it could be customised and sensibly transferred to other protected areas and adjacent communities.

#### *9.2.3.2 Research Objective 7.2*

**RO 7.2: To develop recommendations for implementation of the theory for both the communities and the managements of protected areas, in order to facilitate a positive relationship, aiming for improved achievement of the dual goals of biodiversity conservation and community wellbeing.**

Research Objective 7.2 was achieved in Section 8.3 and constituted the third layer of analysis and interpretation. Like IPAB, the recommendations originate from the meta-themes and can therefore assist in the implementation of the theory. In acknowledging the vital role of both the community and the protected area in facilitating a good relationship, and in fostering economic and social development, as well as biodiversity conservation, practical recommendations were developed for both constituencies. The recommendations for protected area managers can be found in Section 8.3.2, and those for the local community in Section 8.3.3. The provision of recommendations for the community is novel, since it was not encountered in other studies. These recommendations highlight that communities are not passive partners on the receiving end of benefits, but have a role to play in fostering good relationships and actively contributing to economic and social development, as well as conservation.

### 9.2.4 Research Objective 8

**RO 8: To develop a comprehensive integrated framework representing the components that can influence people-park relationships**

Achievement of Research Objective 8 in Section 8.4 formed the fourth and final layer of analysis and interpretation in this study. As demonstrated in Section 2.10, a comprehensive integrated framework which represents the components that could influence people-park relationships, did not exist. In response to this, the PPWW Framework was developed by combining information from four areas of the thesis: the IPAB Theory; existing schema that consider both the community and conservation; existing schema that focus on the community only; and literature from Chapter 2.

The justification for the framework structure, components and relational links was clearly demonstrated in Table 8.2. This was followed by the framework itself (Figure 8.3). As explained in Section 8.4.2, it is a unique framework, which makes a contribution both academically and practically. Due to it including more influences than any other schema, PPWW aids understanding of the wide range of possible influences on people-parks relationships. By customising it to various contexts, the framework can assist stakeholders in achieving a win-win scenario for both communities and protected areas. As part of the cycle of adaptive management, stakeholders can implement what is relevant and possible within their context, monitor the outcome, re-evaluate and adapt once again. A simplified framework was also included (Figure 8.4).

## 9.3 Revisiting the research gaps

The overarching research problem was introduced in Section 1.2 and it was stated that **there is a crucial need to achieve both biodiversity conservation and improved wellbeing for communities bordering protected areas. Yet, this is dependent on the attitudes and behaviour of local people, and there is limited knowledge concerning the influences on attitudes and behaviour. Moreover, although the relationship between protected area management and the local community is vital, limited theory exists on this matter. These gaps in knowledge can make it difficult to achieve the goals of both conservation and human wellbeing, i.e. the attainment of middle ground between protected areas and local people.**

Within this overarching research gap/problem, five individual research gaps were identified, which were unpacked amidst related literature in Chapter 2. As this study draws to a close, these are briefly revisited.

1. **There is lack of consensus on the relationship between benefits, losses/costs, pro-conservation attitudes and pro-conservation behaviour.**

This research gap was introduced in Section 2.5. Attitude was defined (in Section 2.2) as "a state of mind of the individual toward a value" (Allport, 1966:24) or "an enduring predisposition towards a particular aspect of one's environment" (McDougall & Munro, 1987:87). The reader was also reminded of the close linkage between perceptions and attitudes – that perceptions strongly influence attitudes. Hence, perceptions were sometimes discussed in this thesis, but the results represented in the IPAB Theory were limited to attitudes, as per the title of this thesis. As Sirivongs and Tsuchiya (2012) point out – attitudes of local residents towards protected areas can be considered supportive, neutral or opposing in terms of the situations and problems. The IPAB Theory therefore contains specific instances where a benefit or loss resulted in clear positivity or negativity towards the protected area.

While it is not always possible to link a certain attitude to a particular benefit received, this study did show that benefits (in particular the top ranked benefits) did result in participants being positive towards the protected areas, in some cases even excited. Hence, the **results do link benefits to attitudes that are positive towards the protected area.** In terms of pro-conservation behaviour, only a few linkages between attitudes and behaviour emerged. For example, at Mkhambathi, people who had been trained in the past under a programme (a benefit) and had a positive attitude towards the reserve due to this benefit, remained ardent protectors of the reserve even though they no longer benefited. At Phinda, the community have even caught poachers. In this case, there was not a specific link between a benefit and this behavioural action, but overall, the Mnqobokasi community were very positive about their relationship with Phinda and about the reserve. Therefore, **links can be made between positive attitudes and actual behaviour that is positive for the environment.** At Dinokeng, where the fewest benefits were noted by the community, the active protection of the boundary wall by some individuals surfaced as a pro-conservation behaviour. It was not possible from this study to determine whether a specific attitude preceded this behaviour.

Likewise, the perception of losses caused participants to feel negative towards the protected area, and in some cases impacted on actual behavioural actions, for example, lack of information and distrust of the boundary fence negatively impacted on the community's sense of responsibility and the actions they would or would not take to protect the reserve. Hence, **results do link losses to negative attitudes and tentative links can be made between negative attitudes and negative behaviour.**

Figure 2.13 displays the literature review summary, which illustrates the different options for linkages between benefits, attitudes and behaviour (as revealed in the literature reviewed). In closing, based on the findings of this study, the relationship is depicted as follows, with the solid arrow representing a definite linkage, and the dotted arrow representing a tentative linkage:


There is a further finding, however, that could impact on these linkages. In all three cases, it emerged that locals appreciated the protected area and the value of conservation, wanted to curb poaching, and clearly desired environmental education, wanting to understand their role in and impact on the reserve (see 'Facilitators' and 'How to increase positivity' in the IPAB Theory in Figure 8.2). These indicate that there may be other forces in action which impact attitudes and behaviour other than benefits and losses. This may explain, for example, why Dinokeng locals who receive little benefit are willing to protect the boundary wall. The implication of this is that managers and park staff should ensure that environmental education does become a benefit received, since this could encourage an intrinsic appreciation of nature which could result in pro-conservation behaviour.

**2. Inadequate knowledge exists regarding benefits and losses/costs, with even less focus on intangible benefits as well as losses/costs.**

This gap was explained in Section 2.7, and has largely been addressed in Section 9.2.2.3. The research sought to determine whether benefits encouraged pro-conservation attitudes and behaviour and which benefits matter most. A ranking of benefits has also not been done previously. It was clear that benefits do indeed increase positivity towards the protected area, particularly the top ranked benefits. It is, however, harder to prove if a specific benefit results in actual positive behavioural actions.

Existing research highlights the difficulties in measuring intangible benefits. The study showed that intangible benefits are vital, as discussed in Section 7.4.1. They can also be simpler and more cost-effective to implement. Each protected area should thus aim to have a combination of both tangible and intangible benefits.

Regarding losses, few studies focus on these, yet they can be key in causing opposition to a protected area and influencing attitudes and behaviour. This research identified losses at each case study site which clearly increased negativity towards the protected area. Losses were shown to be as important as benefits, and hence should be included in conservation studies. Those emerging as meta-themes were included in the theory. Furthermore, the community 'see' more losses than park staff, and this perception needs to be addressed.

The dual focus in this study on both benefits and losses has therefore made a contribution and assisted in resolving this research gap.

**3. Most studies focus on local communities and few include the perspective of conservationists and those involved in managing tourism within protected areas.**

The third research gap was introduced in Section 2.9. The use of two constituencies added richness to the study, enabling deeper understanding of the issues. Comparisons of the responses of community members and protected area management yielded valuable lessons and ideas for solutions to improve the relationship between the two. This was discussed in Section 9.2.2.3. Interestingly, Mutanga *et al.* (2017) published research in 2017 (after most of the data for this study had been gathered) which highlighted that focusing on communities only when studying relationships is a shortcoming. Their research into four protected areas in Zimbabwe and the adjacent communities also revealed interesting differences in perceptions between park staff and community members, which are important to address to improve the relationship. Thondhlana and Cundill (2017) in their research on 13 nature reserves in South Africa had a similar finding – sharp contrasts between perceptions of reserve managers and those of the community. In a literature review by Mutanga *et al*. (2015a), this gap is also identified – that most protected area-community relationship studies only deal with community perspectives. Niedziałkowski *et al*. (2018) and Thondhlana *et al*. (2016) have also considered the views of both. The need for involvement of both parties in research could therefore be a growing realisation. At the close of this study, considering what has been learnt, it would seem illogical **not** to include park staff in any research that involves a relationship in which they are integrally involved!

**4. Less studies in this field are purely qualitative.**

This research gap is explained in Section 2.9. In his review on using perceptions to improve conservation and environmental management, Bennett (2016) asserts that preference is given to quantitative methods in the social sciences, which results in an incomplete picture of the multiple facets involved in conservation. He argues for the inclusion of qualitative studies to provide a more holistic picture on which to base management decisions. Moreover, in Section 2.9, which compares this research to related work, very little of this work was qualitative.

This research followed an innovative comparative multiple-method qualitative approach, using contrasting case studies and adapted grounded theory. In doing so, it has produced findings that have added to the field of study. These are discussed in Section 9.4.

**5. A comprehensive integrated framework which optimally represents the components that could influence people-park relationships, does not exist.**

The final research gap is set out in Section 2.10. In the literature, other scholars highlighted gaps in current frameworks, outlining that these **do not**: facilitate an understanding of the relationship that people have with protected areas; make provision for comparison between protected areas; capture

the complexity and dynamic nature of relationships, because they are over-simplified; and do not make provision for a multi-dimensional approach to community wellbeing. This research gap was addressed in two stages. Firstly, a middle-range substantive theory (in diagram format) that is entirely data driven was constructed (Research Objective 7.1). Secondly, using the theory, existing schema and existing literature as building blocks, the comprehensive integrated framework (PPWW), represented in Figure 8.3, was developed to represent the components that influence people-park relationships (Research Objective 8). Its uniqueness and value was explained in Section 8.4.2. At the close of this research, a comprehensive integrated framework which optimally represents the components that could influence people-park relationships, does now exist.

**In closing, taken compositely, the addressing in Section 9.3 of the research gaps results in the overarching research gap being addressed. The achievement of the research objectives in Section 9.2 results in the achievement of the research aim, thus answering the research question.** The research has shed light on the influences on pro-conservation attitudes and behaviour; and the centrality of the people-parks relationship. Furthermore, this knowledge has been optimally represented via a middle-range substantive theory and a comprehensive integrated framework. This knowledge can be used to simultaneously further the goals of both biodiversity conservation and human wellbeing, and assist in alleviating the biodiversity and poverty crises.

## 9.4 Key contributions

The next three sub-sections highlight the methodological, theoretical and practical contributions of the study.

### 9.4.1 Methodological contribution

- The particular bouquet of methods employed across three contrasting case study sites and the type of questions asked, has not been found elsewhere. The mix of research methods for C1 (adapted NGT, focus group interviews and mapping) proved valuable in gathering and triangulating the data in the peri-urban and rural communities that formed part of this research. With hundreds of documents and 1 217 coded quotes involved, the use of Atlas.ti analysis software facilitated the comparison across questions, case studies and constituencies.
- Since C1 and C2 each have very different contexts, the researcher concludes that it is essential to gather data from both constituencies for a more comprehensive understanding and to provide a better triangulated response to these dual realities.
- The ranking of benefits and costs has not been found in other studies, apart from a quantitative classification of benefits and threats by De los Angeles Somarriba-Chang and Gunnarsdotter (2012). The use of the adapted NGT worked well in the respective peri-urban and rural communities, and

provided a mechanism for them to rank benefits and losses with ease. Furthermore, participants largely managed this process independently with limited involvement by the researcher. The ranking of benefits and losses proved critical in determining which of these mattered most to communities. C1 and C2's perceptions of the top benefits did not always align. Awareness of, and addressing these areas of non-alignment is crucial to improving pro-conservation attitudes and the people-parks relationship.

- The researcher found little evidence of mapping (or drawings of any kind) being used in rural/peri-urban research. This method used in conjunction with others, constitutes a methodological contribution.

### 9.4.2 Theoretical contribution

- The generation of the middle-range substantive theory, IPAB, aids understanding of the factors that influence pro-conservation attitudes and behaviour. There is currently a limited understanding of this domain and consensus is lacking on these relationships. While this data-driven theory does not purport to provide all the answers, the researcher did not encounter any other schema that represented the dynamics and interaction of the pertinent phenomena as IPAB does.
- Most research on local communities near protected areas, focuses on the importance of tangible benefits and participation, and local peoples' attitudes towards the environment. Few studies, however, have focused on the influence of intangible benefits and losses/costs. In this research, intangible benefits were drawn out through the questions and were ranked alongside tangible benefits. This process revealed the crucial (and underestimated) power of intangible benefits in improving attitudes and behaviour towards protected areas. Moreover, losses/costs received equal attention to benefits, with the research demonstrating the negative influence of losses on pro-conservation attitudes and behaviour.
- In Chapter 2, the in-depth investigation into tangible and intangible benefits as well as losses, provides a helpful resource for academics. Moreover, the summary at the end of Chapter 2 (Figure 2.13) extends this resource to encapsulate in a single diagram, all the influences on pro-conservation attitudes and behaviour, as per the literature reviewed.
- When comparing the results of this research to existing literature, several new findings emerged. The exploration into the responsibilities of communities and the responses these evoke yielded new insights that contribute to the body of knowledge. C1 recognised several responsibilities towards the respective reserves and indicated that these resulted in positive attitudes and behaviour towards the environment. In addition, the importance of C1 entering the reserve for leisure is a novel finding in the African context, and considerably shapes attitudes towards the protected area. Furthermore, C1 were serious about environmental education, so that they could play a positive role in conservation. While literature acknowledges the importance of environmental education, the strong desire for environmental education and information dissemination, as found in this study, does not emerge. Perhaps stakeholders are unaware of how much this is desired.

- The PPWW Framework fulfils a need for a more complex, multi-dimensional type of framework. It is unique due to its: structure and arrangement; detailed focus on beneficiation; incorporation of more stakeholders, as well as their characteristics; emphasis on community wellbeing being equally important to biodiversity conservation; centrality of the people-parks relationship; and inclusion of an output layer which demonstrates how the preceding layers can culminate in a win-win scenario, and how pro-conservation attitudes and behaviour fit into this. Other scholars can test, customise and add to the framework.

The theoretical contribution is demonstrated by the fact that components of the individual case study chapters have already been published. These are an article in the Journal of Sustainable Tourism, relating to the Mkhambathi/Khanyayo case (Queiros & Mearns, 2019); and an accredited peer-reviewed conference proceeding regarding the Dinokeng/Kekana Gardens case (Queiros, Mearns & Van Zyl, 2018).

### 9.4.3 Practical contribution

- For each case study, the findings, as analysed and interpreted in each respective chapter (Chapters 4, 5 and 6), and particularly the summaries at the end of these chapters, are especially valuable for the respective nature reserves and their adjacent communities. The first summary in each case study chapter (Tables 4.25, 5.25 and 6.25) displays the most pertinent findings and the differences between C1 and C2. The second summary for each case study (Figures 4.13, 5.13 and 6.13) provides critical insight into the aspects that cause positivity and negativity in that community, and the aspects that can improve positivity in future. These are of practical value for stakeholders involved in each of the three reserves.
- The value of stakeholders taking cognisance of differing perceptions between C1 and C2 emerged in this research. Where perceptions do not align, it appears that these could be resolved fairly simply (refer to the Recommendations in Section 8.3), yet make a considerable difference to attitudes and behaviour.
- The research revealed the importance of protected area management and other relevant stakeholders offering a combination of tangible and intangible benefits. While both are necessary, intangibles are often simpler to implement, which can assist protected areas on tight budgets.
- The recommendations in Section 8.3.2 can be used by protected area managers to improve the achievement of biodiversity conservation and the wellbeing of local communities. The set of recommendations for community members (Section 8.3.3) is unique and acknowledges the vital role that the community play in the relationship between people and parks, which if positive can lead to a synergistic win-win for the environment and people. While the recommendations are highly applicable to the three case studies, other communities and protected area management can, however, adapt them to suit their particular contexts. Due to their practical nature, these recommendations constitute a solid practical contribution to environmental management.

- The PPWW Framework as a theoretical contribution was explained above. It also constitutes a practical contribution, as it can be used by stakeholders to: understand the many forces at play regarding the people-parks relationship; consider the range of benefits, and to customise these to their own context and particular constraints faced; and consider the other internal influences and beneficiation principles which can maximise a good relationship and lead to a win-win solution. It is thus envisaged that the PPWW Framework will be a practical tool for protected area management and other stakeholders when developing strategies and plans for the future.

The practical contribution of this research has been validated by the fact that the researcher has already been invited to share practical findings outside of the academic community, with stakeholders involved directly in conservation. In August 2017, the researcher was an invited speaker at the Rhino Protection Conference (at CSIR, Pretoria), where key stakeholders involved in the daily war against rhino poaching had gathered. In March 2018, at the request of the Chief Operations Officer at the Eastern Cape Parks and Tourism Agency, the researcher addressed top management and all ECPTA reserve managers at their annual Imbizo at Cape Morgan Nature Reserve, Eastern Cape. In addition, in October 2019, the researcher was invited to provide feedback on the Phinda/Mnqobokazi case study to representatives of senior management of &Beyond, the CEO of Africa Foundation, the Regional Director of Phinda and Africa Foundation representatives. This took place at &Beyond Head Office in Johannesburg.

## 9.5 Shortcomings and limitations

- Due to the labour intensive nature of processing, coding and cleaning the data, followed by write-up and analysis, the researcher was limited to three case studies, which restricts the generalisability of the primary research findings.
- The possibility exists that, due to using translators at each case study site, their bias, if any, may have influenced participants, and some answers may not be 'perfectly' translated.
- While the researcher went on the assumption that all participants answered the questions truthfully, the researcher has little control over whether respondents were transparent or not, and what their underlying intentions may have been when responding to the questions asked.
- While adapted NGT had the advantage of allowing those who were less active or silent in the FGIs to be heard, a limitation is that the researcher could not probe further into a note, as she did not want to single out certain individuals, and there were time constraints (For C1, the research involved approximately six hours of participants' time). However, clarification of notes was done as a form of member checking.
- Although this research attempts to capture influences on pro-conservation attitudes and behaviour, the results can never capture all the complexities of the people-park relationship, as there could be other external unseen influences at play.

## 9.6 Implications for future research

Various options for future research emerge from this work:

- This area of research is extensive and multifaceted. To build on this work, there is a need for further case studies to be undertaken. The methodology could be replicated elsewhere in Southern Africa or outside of Southern Africa to broaden the findings and to determine to what extent these findings differ. Alternatively, the methodology could be replicated in a set of protected areas which have the same context, such as all being provincial reserves, or all being private; or in single-case research in reserves with different ownership and management structures to those covered in this study.
- The people-parks relationship has surfaced in this study as being of vital importance. Through its focus on pro-conservation attitudes and behaviour, this research overflowed into the realm of relationship. However, future research which specifically focuses on the influences on the people-parks relationship could be of value.
- Considering the poaching crisis in South Africa, and the dearth of research linking poaching to benefits, losses and the people-park relationship, there is a need for future research in this regard.
- The IPAB Theory could be tested at the case study sites from which the data emanated, to verify the theory.
- The usability and value of the PPWW Framework could be tested in future. Alternatively, for researchers seeking to determine which components of PPWW are relevant to a particular case, it could be used as a 'template' in the design of research instruments, both quantitative and qualitative.
- More research is required on the ranking of benefits and losses, so that protected area management can focus on the benefits that matter most to communities and mitigate the losses perceived to be the most serious. This could be done through use of adapted NGT in a group setting, as was done in this research; and among individuals. For the latter, it would be valuable to determine how social context, demographics, history and culture influence the benefits and losses perceived to be most pertinent. This knowledge could improve benefit-sharing initiatives.

## 9.7 Conclusion

*"Now older and wiser, I am happily resigned to the fact that wildlife will make its own running. It is such a successful land-use model in Africa and will inevitably replace unsuitable farming practices … I believe that fences will fall and conservancies will grow. Private sector, public sector and community land will inevitably come together in a productive, multi-use, wildlife economy.*

***It's unstoppable**".*

(Dave Varty, 2008:120)

Impoverished communities bordering protected areas pose a severe threat to the future of Africa's wildlife, and urgent action is required to save what we have left. Yet, for wildlife to stay, wildlife will need to pay its way via the improvement of community wellbeing. This seems possible given the right conditions and a deeper understanding of how to achieve sustainable win-wins in the people-parks relationship.

Protected areas can no longer be separated from the human context, driving the researcher to make a contribution to environmental management in terms of proposals for the dual achievement of improvement in wellbeing for communities as well as biodiversity conservation for protected areas. This study therefore focused on the influences on pro-conservation attitudes and behaviour. An initial wide-ranging literature review and diagrammatic summary on these influences provides a helpful resource for academics. An innovative qualitative research design followed, contrasting the views of the park staff and local communities in three very different case studies. This comparison added richness and depth to the findings. Apart from theoretical and methodological contributions, the research has resulted in practical tools for protected area management and local communities. The Theory of Influences on Pro-conservation Attitudes and Behaviour makes use of the data from Dinokeng/Kekana Gardens, Mkhambathi/Khanyayo and Phinda/Mnqobokazi to explain key influences, to specify the conditions that give rise to pro- or anti-conservation attitudes and behaviours, and to suggest practical achievable solutions. Recommendations are then provided to park management as well as to local communities. The latter recommendations are novel and encourage communities to recognise their roles and responsibilities, to have realistic informed expectations, and to provide practical suggestions for economic and social development, as well as for biodiversity conservation. Existing literature was then integrated with the researcher's theory to produce the comprehensive and multi-dimensional 'People-Parks Win-Win Framework'. This framework is unique and is a significant departure from existing schema, contributing to deeper understanding of the extensive range of influences on this relationship.

The largely untapped power of intangible benefits also emerges in this research. These may be simpler to implement, yet can be significant in changing attitudes and behaviour, such as encouraging a sense of custodianship in local people, and satisfying the strong desire for environmental education and

information regarding the neighbouring protected area. Furthermore, the finding that entering the protected area for leisure substantially impacts community attitudes, is a fresh perspective in the African context.

This work can serve as an exemplar for other studies. The methodology can be replicated elsewhere in South Africa, Africa or further afield, in other case studies. The theory or framework can also be tested to determine which components apply in a particular case, and then customised to that context. The ranking of benefits and losses via Nominal Grouping Technique would have value for any protected area, enabling managers to determine which benefits matter most to communities, to mitigate the losses perceived to be the most serious, and to optimally design a sustainable and attainable mix of tangible and intangible benefits. Finally, by considering the views of both constituencies, areas of non-alignment between the two can be addressed, such as acknowledging the losses perceived by communities and 'marketing' existing benefits that are not acknowledged by local people.

Win-win solutions are hard to achieve, and park management experiences constraints in terms of what can realistically be achieved with the resources at hand. Yet, establishing and nurturing the buy-in of impoverished neighbouring communities is essential to future success. With greater insight into the multi-faceted influences on pro-conservation attitudes and behaviour (which simultaneously impact on the relationship between a protected area and the community on its border), real progress can be made. Commitment and genuine intent to address the poverty crisis in communities adjacent to protected areas is required from government, conservation agencies and other stakeholders. Furthermore, a positive and close relationship between the people and the park is essential, infusing the human dimension into conservation strategies.

The constant focus on both the community and the protected area in this research emphasises the importance, in moving forward, of a balanced social-ecological approach to conservation. Middle ground win-wins will never be perfect, but this is the nature of adaptive management – to apply new knowledge gained from research to implement changes, monitor, and adapt again – resulting in improved wellbeing in communities surrounding protected areas and long-term support for biodiversity conservation. Returning to the quote from Steve Irwin at the beginning of this chapter, "If we don't, everyone loses … one day". All stakeholders need to perpetually strive for new solutions to avoid, at all costs, a final score of lose-lose, and rather to achieve innovative and sustainable people-park win-wins that will truly be unstoppable.

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# APPENDICES

## APPENDIX A: META-ANALYSIS OF PRIMARY RESEARCH ARTICLES

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 1 | (Agrawal & Gupta, 2005) | To examine who participates in environmental decentralisation programs. | Four of five protected areas in Terai region, Nepal (U). | Quantitative data collected from households (e.g. demographics, socio-economic conditions, education level, forest harvest, access to local government office). Data was statistically analysed. | 240 households which are in four settlements in the buffer zones of the protected areas that formed part of this study. |
| 2 | (Allendorf *et al.*, 2006) | To examine the attitudes of communities towards protected areas. | Communities living around three protected areas in upper Myanmar. | Standardised open-ended surveys. Analysed by inductively creating categories after consideration of the responses. Some questions used counting and quantitative statistical analysis. | 30 Households (any person over age 18) chosen randomly in 97 villages surrounding three protected areas. 2915 surveys conducted by trained school teachers. |
| 3 | (Campbell *et al*., 2007) | This study was repeated ten years apart to determine how perceptions of the egg harvesting community-based conservation programme had changed. | Ostional, Costa Rica. | Survey with likert-scale closed questions and open-questions. The latter were coded and categorised according to themes. | Ostional households participating in programme were part of study with 76 and 60 households surveyed in 1995 and 2004 respectively. |
| 4 | (Clark *et al*., 2003) | To determine influences on pro-environmental behaviour based on participation and non-participation in a green electricity project. | Michigan, USA. | Quantitative mail survey using Schwartz norm-activation model and a modified New Ecological paradigm scale. Questions made use of three different scales. | 281 participants and 619 non-participants completed survey. |
| 5 | (De Boer & Baquete, 1998) | To provide detailed analysis of protected area/people relationships in Mozambique; understand importance attached to each natural resource, attitudes towards protected area and what influences these. | Maputo Elephant Reserve, Mozambique. | Written questionnaires, mostly closed questions, analysed quantitatively. | To 50 households in each of the four villages outside the elephant reserve. |
| 6 | (de los Angeles Somarriba-Chang & Gunnarsdotter, 2012) | To explore factors influencing community participation in ecotourism and how this affects conservation. | Two nature reserves in Nicaragua. | Quantitative and qualitative techniques: Individual structured (for tour operators) and semi-structured interviews (for farmers) and focus groups (locals). | Local people, farmers and tour operators |
| 7 | (Gadd, 2005) | To determine if pastoralists experience conflict and if conservation provides sufficient benefits and fosters pro-conservation attitudes amongst residents. | Laikipia District, central Kenya. | Interviews with open-ended questions and a few multiple-choice. Analysed by building categories and tallying responses within these. To identify correlations, Pearson chi-squared and analysis of variance (ANOVA) were used. | Three communities representing different land-use types and ownership structures: Mpala, Koija and Endana. An adult within each household was interviewed. 74 interviews in total. |
| 8 | (Gurung & Seeland, 2011) | To explore livelihoods of three rural communities (in or nearby protected areas) to determine if ecotourism could supplement the traditional economy. | Three communities living along trekking routes in/ nearby Bhutan protected areas. | Controlled comparison method used to determine socio-economic conditions. Structured questionnaires. Analysed using SPSS. | In total, across the three sites, 323 members of households along three trekking routes, one of which is not open to tourists. |

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 9 | (Imran *et al*., 2014) | To examine differences in environmental orientation of four stakeholder groups linked to protected area tourism and to determine what influences their intentions to engage in pro-conservation behaviour. | Central Karakoram National park, Pakistan. | *Quantitative on-site convenience survey using the New Ecological Paradigm scale (NEP) which measures general environmental attitudes. Data analysed using SPSS.<br><br>*Qualitative face-to-face interviews. Findings grouped into categories/themes. Dual methods aided triangulation. | *Community members, tourism enterprises, staff working in protected areas and tourists.<br><br>*Community members, tourism enterprises, staff working in protected areas and tourists. |
| 10 | (Infield & Namara, 2001) | To assess the impact of a community conservation programme by looking at community attitudes and behaviour. | Lake Mburo National Park, south-western Uganda. | Surveys on community attitudes and behaviour. Formal questionnaires with open and closed questions. Rapid Rural Appraisal and key informant interviews used for triangulatation. Data analysed quantitatively using chi-square tests. | Community members from communities that had been part of a conservation programme and those that had not. It appears that senior park staff were also part of the study, perhaps as key informants. |
| 11 | (Kideghesho *et al*., 2007) | To investigate how conservation attitudes in the western Serengeti are shaped by pre-specified factors (e.g. conflict, wildlife imposed constraints and socio-demographic factors). | Western Serengeti. | Survey distributed to 282 households in villages in various districts. | To household head or wife or another adult (in that order). Quantitative with statements followed by different options. |
| 12 | (Lapeyre, 2010) | To assess potential contribution of community-based tourism enterprises to empowerment and poverty alleviation. | Tsiseb Conservancy, Namibia. | Quantitative (questionnaires) and qualitative (semi-structured interviews, focus groups and observation). | At individual and household level – life story questionnaires and semi-structured interviews. Guides and key informants from tourism and NGO bodies were interviewed, focus groups held with guides and important stakeholders e.g. traditional leadership. |
| 13 | (Lee, 2013) | To assess support of community residents for sustainable tourism development. | Cigu Wetland, Taiwan. | Quantitative survey using likert-scales. Analysed using quantitative statistics. | Residents of Cigu Wetland. 98 usable surveys were collected. |
| 14 | (Licona *et al*., 2011) | To use the occurrence of ungulates as a measurement of environmental health, and by doing so to evaluate the success of community-based conservation. | Foot of Andes Mountains, western edge of Amazon basin, Peru. | Camera and track surveys of ungulates. Quantitative data collected and analysed using statistics. | N/A |
| 15 | (Liu *et al*., 2014) | To determine the role of social capital in encouraging residents' pro-environmental behaviour. | Two typical ecotourism destinations in China. | Qualitative to work out what to include in survey (an interview and village-wide meeting) and quantitative (statistically analysed using descriptive statistics and structural equation modelling). | 420 residents living in these destinations. |
| 16 | (Matarrita-Cascante *et al*., 2010) | To examine local social interactional elements needed to achieve sustainable tourism practices. | La Fortuna, Costa Rica. | Key informant interviews (open-ended questions analysed using content-analysis); participant observation. | People who had knowledge of community and were involved in community, regardless of socio-economic status or position. |

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 17 | (Mbaiwa & Stronza, 2010) | To analyse the effects of tourism development through Community-Based Natural Resources Management (CBNRM) on rural livelihoods. | Three villages (Khwai, Sankoyo and Mababe) in Okavango Delta, northwestern Botswana. All involved in CBNRM and have a wildlife-based tourism approach which included hunting and photographic tourism. | Longitudinal data which analysed livelihood changes over ten years of tourism development.<br>*Ethnographic observation<br>*Household interviews<br>*Unstructured interviews with key informants. Open-ended questions.<br>*Unstructured focus-group discussions with open-ended questions.<br>*Secondary sources eg research reports, policy documents and articles. | *Households in the villages – household heads or representatives (54 females and 36 males)<br>*Biologists and community leaders (e.g. chief, chairperson of board of trustees and government decision-makers) (14)<br>*Village development committee and Board of Trustees in each village |
| 18 | (Mehta & Heinen, 2001) | To examine if community-based conservation leads to better attitudes, and if personal costs and benefits influence these attitudes. | In two conservation areas, Nepal. | Multi-methods: quantitative surveys (administered orally) and qualitative informal interviews. Attitudes were measured using statements followed by five possible responses. Data analysed quantitatively using SPSS. | Surveys with adults in households; interviews with key local informants (e.g. school teachers and community leaders) and project staff. |
| 19 | (Nyaupane & Poudel, 2011) | To explore relationships between biodiversity conservation, livelihood improvements and tourism development. | Three communities around Chitwan National Park, Nepal at various stages of tourism development. | Appreciative Inquiry | In each community, researchers aimed for five members from each of the following groups: national park employees, local people, NGOs and community-based organisations, and tourism entrepreneurs. |
| 20 | (Odindi & Ayirebi, 2010) | To identify socio-economic impacts and perceptions of the local communities surrounding the reserve. | Eight communities surrounding/living in Great Fish River Reserve, South Africa. | Questionnaires, focus group discussions, interviews and observations. Article not clear whether interview and question-naires were quantitative or mixed. | 60 questionnaires randomly distributed to household heads in each village; interview with reserve manager; and focus group discussion of 22 villagers. |
| 21 | (Ogunbode, 2013) | To examine environmental attitudes amongst students. | Students at University of Ibadan, Nigeria. | Survey based on New Ecological paradigm (NEP) scale, items scored using likert-scales. Quantitatively analysed. | 355 questionnaires obtained from students. |
| 22 | (Pfueller *et al*., 2011) | Regarding sustainability outcomes of partnerships between natural-area managers and the tourism industry – how important are they, how well realised are they and what led to their achievement? | 21 case studies in Australia. | Quantitative questionnaires via mail, followed up with face to face qualitative interviews. Survey data analysed statistically using SPSS; qualitative data in spreadsheets and classified into themes. | Those involved in partnership, either through employment or participation. |
| 23 | (Reimer & Walter, 2013) | To advance knowledge on the complex relationship between community-based ecotourism and sustainable development using a pre-existing analytical framework. | The Chiphat Project (Community-based ecotourism project) in Chiphat, southwestern Cambodia. | Exploratory qualitative case study<br>*Exploratory interviews<br>*Interviews<br>*Focus groups<br>*Participant and direct observation, project documents | *Held in Phnom Penh with 10 participants from key NGOs involved in ecotourism.<br>*All major stakeholder groups in Chiphat Project e.g. CBET staff, homestay hosts, local villagers and guides.<br>*Key CBET stakeholders e.g. guides, hosts, cooks, drivers, crafters. |

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 24 | (Sachedina & Nelson, 2010:392) | To investigate what type of economic benefit scheme works best. | Northern Tanzania's Maasai Steppe. | *Two surveys containing quantitative and qualitative questions.<br>*Semi-structured interviews | *One survey with household heads; the other with men and women in household.<br>*Wide range of participants including villagers, village leaders, tourism operators, NGO staff, farmers and government employees. |
| 25 | (Saufi, *et al*., 2014) | To investigate host community perceptions on obstacles to their participation in tourism development. | Lombok, Indonesia. | In-depth interviews, qualitative questionnaires and observation. Analysed using content analysis. Emergent themes recorded and counted. | Groups of residents living in a developed tourism destination, a less developed destination, a rural village far from tourism destinations, and group of university students. |
| 26 | (Shibia, 2010) | To determine: relationship between socio-economic characteristics and attitudes/perceptions towards conservation; effect of wildlife benefits and costs on attitudes/perceptions; if attitudes/perceptions are affected by living near reserve. | People living near Marsabit National Reserve, Kenya. | Survey on households (using stratified random sampling) with combination of closed and open questions. For triangulation, used informal interviews, field observations and focus group discussions. Analysed quantitatively using SPSS and cross-tabulations. | 187 surveys with head of household or wife/oldest person present in his absence. |
| 27 | (Snyman, 2012a)<br>*Snyman (2012b) uses same methodology but in Botswana, Malawi, Namibia, focusing on role of tourism employment in reducing poverty and creating positive conservation perceptions. | To shed light on joint venture partnerships between a community conservancy and a private sector ecotourism operator. | Torra Conservancy and Damaraland Camp, Namibia. | One-on-one structured questionnaire interviews with mainly closed questions and a few open-ended. Interviewer filled in the questionnaire for respondents, who answered verbally. | 19 staff employed at Damaraland Camp and 60 community members residing in the conservancy. |
| 28 | (Snyman, 2014) | To assess main factors impacting on the attitudes of community members. | Six southern African countries (Botswana, Malawi, Namibia, South Africa, Zambia and Zimbabwe). | Structured interview to complete a questionnaire with mainly closed questions. Interviewer filled in the questionnaire for respondents, who answered verbally. Data analysed using SPSS. | 1400 interviews conducted with household heads in villages where village had partnership with- or was in/adjacent to- a conservation/protected area, or combination of these two. If household head unavailable, the spouse or next eldest was interviewed. |
| 29 | (Sommerville *et al*., 2010) | To examine opportunities and challenges posed by a Payment for Environmental Services (PES) scheme, focusing on the role of fairness and benefit distribution. | Forest conservation areas in Menabe, Madagascar. | 656 structured interviews with individuals and 55 semi-structured interviews with small focus groups. Questions mainly open-ended. Analysed quantitatively. | Individuals in participating communities. Did not have to be head of household. More men interviewed than women as they traditionally participate in forest-use more than women. |
| 30 | (Stem *et al.*, 2003) | To examine the effects of individual and community involvement in ecotourism benefits on pro-conservation practices and perspectives. | Selected communities living in buffer zones around national parks in Costa Rica. | Mixed methods. Qualitative included focus groups, open-ended interviews and observation. Quantitative involved a survey. | Hoteliers and community members involved in tourism where conservation was a reason for establishment; established at least five years prior to research; with historical reliance on natural resources. |
| 31 | (Stoll-Kleemann, 2005) | To look at how best to integrate ecological and socio-economic processes to result in better governance of protected areas. | Subtropical and tropical countries. | Quantitative meta-analysis of cases from literature, and detailed interviews. | People working in protected areas such as conservationists, scientists, managers, NGOs. |

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 32 | (Stoll-Kleemann *et al.*, 2010) | To, in the context of Biosphere Reserves (BRs), analyse what makes community participation in management and decision-making more or less effective in relation to biodiversity conservation. | Various Biosphere Reserves (BR) worldwide. | Two parallel global surveys:<br>*First explored factors influencing success or failure of BR management via structured interviews over telephone, electronically or post. Used open questions, likert-scales and asked respondents to rank threats to biodiversity. Answers to open questions were synthesised into categories.<br>*Second focused on extent of participation by different stakeholder groups in BR management, and self-evaluations on BR management effectiveness (self-administered online questionnaire, containing multiple-choice, open and likert-scale questions). For *both* surveys, data exported into SPSS for quantitative statistical analysis. | *Managers of UNESCO BRs<br><br>*BR coordinators, directors and managers |
| 33 | (Stronza & Gordillo, 2008) | To determine what kinds of changes are introduced to communities involved in community-based tourism, and what the implications of these changes are for community institutions and long-term conservation and development. | Three ecotourism projects in the respective countries of Peru, Bolivia and Ecuador, all in the Amazon. | Semi-structured interviews with households and observation. To determine themes for interview questions, open-ended interviews, workshops and focus groups held, consisting of 10 to 12 men and women. | 164 households that were highly engaged in ecotourism projects and households that were less engaged. |
| 34 | (Tessema *et al*., 2007) | To examine community perceptions in and around four protected areas in Ethiopia. | Four protected areas in Ethiopia. | *Two focus groups conducted with 8-15 people. Data analysed using text analysis.<br>*From this, they developed a questionnaire with open and closed questions. Analysed quantitatively using Chi-square tests and logistic regression. Open ended data was put into categories. | *Key informants randomly selected from village associations.<br><br>*For household heads. 384 were completed, using an interview. |
| 35 | (Tran & Walter, 2014) | To investigate women's participation in a community-based ecotourism project | The Giao Xuan community adjacent to Xuan Thuy National Park in Northern Vietnam.<br>(Those involved and not involved in community-based ecotourism project). | *In-depth semi-structured interviews.<br><br>*Interviews with individuals and groups.<br><br>*Participant observation and document review. | *Leadership of the ecotourism cooperative and the Women's Union, community elders, national park leadership, staff specialists in gender and ecotourism.<br>*People who had participated in CBET project since its inception. |
| 36 | (Walpole & Goodwin, 2001) | To examine local attitudes towards protected area tourism and the effects of tourism benefits on local support for Komodo National Park, Indonesia. | Komodo National Park, Indonesia. | Quantitative structured survey, analysed using SPSS. | 401 households. |

| | SOURCE | FOCUS OF STUDY | AREA | RESEARCH METHOD | PARTICIPANTS/RESPONDENTS |
|---|---|---|---|---|---|
| 37 | (Waylen *et al*., 2009) | To determine if ecotourism affects local perceptions of natural resources and conservation, since these can be important determinants of conservation behaviour. | Village of Grande Riviere, Trinidad, which hosts a community-based ecotourism project to conserve leatherback turtles. | *Rapid Rural Appraisal (RRA) and questionnaire-based interviews were used to collect qualitative and quantitative data. For RRA, small groups (3-6 people) discussed topics to provide a context of village life as well as attitudes to local natural resources.<br>*The questionnaire contained closed (including likert-scales) and open questions on knowledge, use and attitudes towards resources, and socio-economic indicators. | *RRA involved small groups of villagers – men, women and children respectively and a mixed group.<br>*Households (article does not mention who in the household participated). |
| 38 | (Wunder, 2000) | To investigate link between tourism, local benefits and conservation. | Cuyabeno Wildlife reserve, Ecuadorian Amazon region, near border of Columbia and Peru. | *Semi-structured interviews<br>*Rapid appraisal of socio-economic framework and local tourism participation<br>*Observation<br>*Short questionnaires<br>*Interviews | *Villagers<br>*Tour operations<br>*Tourists<br>* Operators and stakeholders |
| 39 | (Wyman & Stein, 2010) | To examine linkages between benefits, place-based meanings and involvement in conservation. | Within the Community Baboon Sanctuary, Belize. | Initial meetings to identify benefits, which were then included in survey. Survey conducted as interview with quantitative and qualitative questions, mainly using likert-scales. Mainly reported on quantitatively. | 135 households. Researchers targeted those not involved (via the heads of households); and those involved (via the involved family member). |

# APPENDIX B: CASE STUDY PROTOCOL

**Pre-planning – general**

Prior to visiting the case study site, email contact is made with the reserve manager and a letter sent to inform them of the research and what would be required for the research (See Appendix G). Some reserves have their own application forms which first need to be completed.

## CONSTITUENCY 1

**PRE-PLANNING**

Via the reserve manager, the researcher is put directly in touch with the community leader, or the reserve manager or another key member of staff handles the initial discussions himself/herself. The community leader is also sent a letter explaining the research to him/her and the participants required (see Appendix G). From then on, communicate directly with the reserve manager and/or the community leader regarding suitable dates and a venue convenient for the community, which can accommodate the focus group as well as the mapping group simultaneously. Make arrangements for a local translator (proficient in both English and the local dialect) to assist, who is paid by the researcher.

One requires a morning of their time (approximately 8:30 am to 2pm) and provides a tea time snack and lunch. In discussion with the reserve manager and community leader, the lunch catering is outsourced to ladies from the community who are paid by the researcher. Supply the drinks and biscuits for tea time.

Prior to beginning the session, the chief/community leader should already have signed the form which gives the researcher permission (see Appendix H) to conduct the research in the community.

**RESEARCHER TOOLKIT**

The following materials are needed for the research with C1: name tags, coloured stickers to denote groups, thick markers, pens (for signing informed consent), crayons, coloured pencils, coloured felt-tip pens, post-it notes of various colours, flip-chart paper, prestik, glue, sticky tape, informed consent forms, permission forms for community leader, examination pads for writing notes during interviews, cell phone to record interviews, digital recorder as backup recording device, cell phone or camera to photograph flip chart pages, memory stick to backup interview recordings, polystyrene cups, biscuits for tea, juice, ice, 5 litres of water, jugs, coke for lunch, and receipt book (for proof of payment to catering people and translator). Depending on facilities of venue, one may need to take a fold-up table and hardboard for the mapping exercise.

**RESEARCH SESSION WITH C1**

On meeting the translator, guide him/her as follows: do not lead the respondents, or give them examples of answers; don't lead or assist the mapping – just explain what they need to do, and then come back to the focus group interview; ensure that every idea in the focus group interview is properly translated - let's hear an idea, translate it and then move on; and avoid giving your own opinion or leading the group in a certain direction.

Begin by welcoming the group and thanking them for their attendance. Explain the purpose of the research and why they have been asked to attend. The informed consent forms (see Appendix J) are then explained in detail and handed out. Participants sign the second page, and keep the first page for their own records. Both the welcome and the explanation of informed consent is translated and explained by the translator. The researcher found that the informed consent makes participants suspicious – they are often wary regarding what they are signing, and they need quite a lot of time for this process. Allow the translator plenty of time to explain it and set them at ease. Participants' names are not attached to the information they provide. They remain anonymous, and any photos taken during the research process cannot show faces.

Questions 1 to 7-5 (See Table 3.1 in Chapter 3) are asked in the **focus group interview**, while Questions 8-6 and 9-7 are asked using simplified **NGT**. While one focus group is in the interview**,** the other focus group draws a map of the nature reserve and their community (**mapping**). Question 10-8 is asked of the whole group at the end.

**Focus group interviews**

Make notes of focus group composition in terms of:

- total group size, age and gender distribution.
- group colour and number (1 or 2). Individuals are given name tags and a coloured sticker (purple or green) to show which group they are in.
- which focus group draws first (mapping), and which has the focus group interview first. Label the focus group's map with their group number and colour.
- anything else that stood out in terms of the group, such as an individual who dominates, or the presence of community leaders, young women, etc.

The interview group needs to sit around a table with an audio recorder in the middle. Avoid speaking simultaneously and explain this to respondents in the beginning. Avoid classroom style seating. The focus group interview session is recorded, but first ask for their permission to do this. In addition, write down the responses of participants.

At the end, after both focus groups have had their focus group interview and done their mapping, Q10-8 is asked to the whole group (both focus groups combined) in the form of a large single focus group. This is also recorded and notes made.

**Mapping**

Prior to commencing the focus group interview with the other group, with the translator present, explain to the mapping group that they need to draw a map of the reserve and their community. No further guidelines are given, as one wants to see what will emerge strongly in their map without any prompts. They can use words, pictures or both. One wants them to very free in this exercise to generate how they see their community together with the protected area. Participants are given a flipchart page, coloured pencils, pens and crayons. This activity must take place in another room or on a table outside, away from the focus group interview, where they cannot hear the responses of the focus group. Once the first focus group is complete, the two groups swap, and the other group draw their map.

**Adapted NGT**

For questions 8-6 and 9-7, data are generated using post-it notes. For each question, the procedure outlined below is followed. Participants generally struggle with the first question as it is most likely their first time doing an exercise like this, but quickly catch on, and actually enjoy it.

- The question is written up clearly on a large piece of flip chart paper.
- Participants are given several post-it notes, with females getting a different colour to males, to determine any differentiation in gender responses. Openly explain to participants that the researcher wants to see if there is any difference between what females and males think regarding these questions. After asking each question, and while participants are busy writing their notes, make a note on the flip chart page regarding which gender had which colour; and how many males and females are present[42].
- Allow time for participants to write their responses down. They need to write out one idea per note. The idea can be in the form of a word, sentence or picture; and in the language they are most comfortable with. Participants may generate as many notes as they wish. Five minutes is normally sufficient, but observe, and when one notes that the majority are finished, invite them to come up and start pasting their notes onto the flip chart page.
- Participants then come up to the white page and paste on their responses. Opportunity is given for anyone to add further responses.

42. This analysis was not included in the thesis because it did not yield anything significant when considered across all three case studies.

- For each question, make notes on the flip chart page regarding composition of group (number, gender, age), as some participants may have left after the preceding question.
- Clarification of any notes that are unclear or in local dialect (and need to be translated) is done immediately. One can sometimes check with the actual participant who wrote the note (if the meaning was unclear), but try to avoid this approach, since participants can be uncomfortable with the researcher asking the group who wrote a particular note and 'singling them out'. Often, other participants mingling around the paper can help clarify the unclear ones. For translations, the translator would usually be used, or another participant who was clearly confident in both languages.
- Let two volunteers (one female and one male) organise the benefits and losses into categories. If answers are the same, for example, a benefit of 'free meat for community celebrations', then these are all put together to form a single category. The volunteers need to seek group consensus on the categories. Using the number of responses in each category, categories are put in order from most important to least important, and numbered as 1, 2, 3, 4, etc. This is done by the participants and led by the two volunteers.
- Ask the group if they agree with this order. If they do not, then have participants vote on it to determine which are the most important benefits and losses. By doing this, benefits and losses/costs can be organised into levels/ranked.

**Closure**

After the final question which is asked in the combined focus group, thank participants for their valuable time and contribution to the research. A community member will usually say grace for the meal, and then everyone eats together.

Before leaving the venue, take photographs of each flip chart page and the map drawings. Ensure that all post-it notes are secure – use sticky tape or glue to ensure that no notes move or fall off when the pages are rolled up and transported.

## CONSTITUENCY 2

**PRE-PLANNING**

Prior to any interviews with C2 participants, the reserve manager signs the permission form for the research to take place amongst C2 participants (see Appendix I). In discussion with the reserve manager or key staff member appointed to assist the researcher, the interviewees are decided on. In some cases, the researcher decides to interview a certain person based on their position at the reserve and involvement with the community.

**RESEARCHER TOOLKIT**

The following materials are needed for the research with C2: pens (for signing informed consent), informed consent forms, permission form for reserve manager, examination pads for writing notes during interviews, cell phone to record interviews, digital recorder to act as a backup recording device, and memory stick to backup interview recordings.

**SEMI-STRUCTURED INTERVIEWS**

Meet participants at a place convenient to them within the reserve. Prior to each interview, explain the purpose of the research and why one wants to interview that particular participant. Ask permission to record the interview. Informed consent needs to be signed by the individual (see Appendix K). Record each interview, as well as writing responses down. Note the date, venue, and name and position of the respondent at the protected area. Before working through the questions, ask the respondent to tell you about what they do at the reserve and how long they have been there. In the interview with the reserve manager, also ask about the history of the protected area. Some interviews can therefore last longer (at Mkhambathi, for example, this interview took 1 hour, six minutes). Interviews ranged from 45 to 66 minutes.

No translator is usually necessary for these interviews as participants should have a good grasp of English. Thank participants for their valuable time and input into the research.

# APPENDIX C: UNIVERSAL CODING FRAME

_____

**GENERAL IDENTIFIER CODES**

#C1
#C2
#Comp: 1F 4M
#Comp: 5F 3M
#Comp: 5F 7M
#Comp: 6F 7M
#Comp: 7F 5M
#Comp: 10F 2M
#Comp: 11F 4M
#Comp: 13 F 6 M
#Comp: 12F 12M
#DK
#DK focus group
#DK interview
#Gender F
#Gender M
#MK
#MK focus group
#MK interview
#PGR
#PGR focus group
#PGR interview
#Pos: Admin assistant
#Pos: Comm outreach officer
#Pos: Hospitality supervisor
#Pos: Landowner
#Pos: Operations manager
#Pos: Reserve manager
#Pos: Senior field ranger
#Pos: Supervisor of maintenance

**CODES TO MARK THE DIFFERENT QUESTIONS**

#Q Drawings_DR
#Q1 Knowl
#Q2-1 Rel
#Q3-2 Neg changes
#Q3-2 Pos changes
#Q4-3 More pos
#Q5 Others views
#Q6 Exper
#Q7-5 Resp
#Q8-6 Benefits (B)
#Q9-7 Losses (L)
#Q10-8 Dream

**BENEFITS**

**BENEFIT CATEGORY NAMES GIVEN BY C1 PARTICIPANTS**

B Cat: Benefit from other attractions
B Cat: Benefits sport
B Cat: Collecting firewood
B Cat: Collecting sand
B Cat: Collecting thatch grass
B Cat: Employment opportunities
B Cat: Enjoying reserve
B Cat: Environmental awareness & education
B Cat: Hunting & fishing
B Cat: Infrastructure
B Cat: Lifesaver training
B Cat: No benefits
B Cat: Sponsorships & saving money
B Cat: Tourism & knowledge of animals
B Cat: Tourism & tourists
B Cat: Using beach

**SPECIFIC BENEFITS AS PER RESEARCHER'S CODING**

B: ACCESS TO NATURAL RESOURCES
B: Access to natural resources: Collect firewood
B: Access to natural resources: Collect sand
B: Access to natural resources: Collect thatch grass
B: Access to natural resources: Fishing
B: Access to natural resources: Hunting animals
B: Access to natural resources: Other
B: Access to natural resources: Places of spiritual importance
B: BENEFITS FROM TOURISM/TOURISTS
B: Benefits from tourism/tourists: Donations from tourists
B: Benefits from tourism/tourists: Inter-cultural contact
B: Benefits from tourism/tourists: Learn about tourism
B: Benefits from tourism/tourists: Learn from tourists
B: Benefits from tourism/tourists: Tourism benefits us
B: DESIRES/NEEDS
B: Desires/needs: Desire for jobs
B: EMPLOYMENT
B: Employment: Benefit from jobs
B: FACILITIES AND INFRASTRUCTURE
B: Facilities and infrastructure: Improved infrastructure
B: Facilities and infrastructure: Improved security

B: GENERAL COMMENTS ON ROLE OF RESERVE
B: General comments on role of the reserve: Animals draw tourists
B: General comments on role of the reserve: Tourism increases

B: LEARNING/TRAINING
B: Learning/training: About animals
B: Learning/training: About environmental awareness/education
B: Learning/training: New skills
B: NO BENEFITS RECEIVED
B: PERSONAL ENJOYMENT OF RESERVE
B: Personal enjoyment of reserve: Having fun
B: Personal enjoyment of reserve: Relaxing
B: SAVING MONEY
B: Saving money: less transport costs as work in reserve
B: Saving money: Lower entrance fee for LC
B: TANGIBLE BENEFITS FOR COMMUNITY STRUCTURES
B: Tangible benefits for community structures: Benefits for sport
B: Tangible benefits for community structures: Recipient of land claim
B: Tangible benefits for community structures: Revenue sharing
B: Tangible benefits for community structures: Sponsorships for community facilities
B: Tangible benefits for community structures: Support for schools & higher education
B: VISITING RESERVE
B: Visiting reserve: Beach
B: Visiting reserve: Seeing animals
B: Visiting reserve: Staying over
B: Visiting reserve: Waterfalls

**DREAMS**

D: General education to uplift community
D: Change LC boundaries
D: Community projects & financial aid
D: Cons/tourism ethos spread into LC
D: Environmental education
D: Facilitate entrepreneurship
D: Interaction with reserve
D: More development and employment
D: Skills development

**DRAWINGS**

DR: Average detail on location/village
DR: Average detail on reserve
DR: Exceptional detail on location/village
DR: Exceptional detail on reserve
DR: Minimal detail on location/village
DR: Minimal detail on reserve
DR: Reserve features: Accommodation
DR: Reserve features: Animals
DR: Reserve features: Human-made landmarks
DR: Reserve features: Natural landscape
DR: Reserve features: Plants
DR: Same detail for location/village & reserve

**EXPERIENCE**

EX: Catering
EX: Feel ...
EX: For: Animals
EX: For: Beach/swimming
EX: For: Parties/functions
EX: For: Relaxation
EX: For: Resources
EX: For: Waterfalls
EX: For: Work
EX: How often?
EX: Learn
EX: Who has been in?

**GENERAL**

G: Appreciation of nature
G: Background to DK
G: Background to MK
G: Board not communicating
G: Different mentality
G: LC must benefit because land is theirs
G: Other
G: Political influence
G: Possible land claims
G: Quotes on misconception of reserve
G: We want to play a part in conservation

**KNOWLEDGE**

K: Accommodation
K: Animals
K: Good comm between reserve and LC
K: Lack of info/access re. reserve
K: LC use reserve for ...
K: Make-up & history of reserve
K: Plants
K: Provides jobs
K: Resources: LC can't access
K: Resources: LC can access
K: Supports LC
K: Tourism

K: Want to be educated on conservation
K: WCPD: Beaches/sea
K: WCPD: Conferences and functions
K: WCPD: Fish
K: WCPD: Flora
K: WCPD: Relax
K: WCPD: See animals
K: WCPD: Swim
K: WCPD: Swim in rivers
K: WCPD: Take photos
K: WCPD: Waterfalls

**LOSSES**

**LOSS CATEGORY NAMES GIVEN BY C1 PARTICIPANTS**

L Cat: Can't collect firewood
L Cat: Can't collect water
L Cat: Can't fish
L Cat: Can't hunt
L Cat: Can't visit ancestors graves
L Cat: Fear of crime
L Cat: Fear of wild animals
L Cat: Insufficient donations
L Cat: Lack of access to natural resources
L Cat: Lack of connection to head of reserve
L Cat: Lack of employment and empowerment
L Cat: Lack of info on reserve
L Cat: Loss of access to medicinal plants
L Cat: Loss of land
L Cat: More crime in festive season
L Cat: No shops nearby

**SPECIFIC LOSSES AS PER RESEARCHER'S CODING**

L: FEAR OF WILD ANIMALS
L: INSUFFICIENT EMPLOYMENT, EMPOWERMENT & DONATIONS
L: Insufficient employment, empowerment & donations: Don't get offered work
L: Insufficient employment, empowerment & donations: Lack of job security
L: Insufficient employment, empowerment & donations: Not being empowered
L: Insufficient employment, empowerment & donations: Not enough donations
L: LACK OF ACCESS TO NATURAL RESOURCES
L: Lack of access to natural resources: Can't access land to farm/loss of land
L: Lack of access to natural resources: Can't access places of spiritual importance
L: Lack of access to natural resources: Can't collect firewood
L: Lack of access to natural resources: Can't collect medicinal plants
L: Lack of access to natural resources: Can't collect water
L: Lack of access to natural resources: Can't hunt
L: Lack of access to natural resources: Restricted fishing
L: LACK OF INFORMATION/CONTACT
L: NO LOSSES INCURRED
L: OTHER
L: Other: Fear of crime
L: Other: Livestock get diseases from wildlife
L: Other: No shops nearby
L: Other: Security of community
L: Other: Visit limitations

**MORE POSITIVE**

MP: Basic needs
MP: Community projects
MP: Development/infrastructure
MP: Employment
MP: Enjoyment of reserve
MP: Information/education
MP: Involvement/interaction
MP: Other
MP: Pride in reserve
MP: Take responsibility
MP: Training

**NEGATIVE CHANGES**

NC: Frustration from lack of action
NC: Harsh on poachers
NC: General
NC: Lack of access to natural resources
NC: Lack of access to reserve
NC: Lack of info & contact
NC: Less jobs than before
NC: Reserve deteriorating
NC: Unfair employment policy
NC: Wild animals: Fear &damage

**OTHERS' VIEWS**

OV: Neg: Fear of animals
OV: Neg: General
OV: Neg: Want employment
OV: Neg: Want information
OV: Neg: Want land
OV: Neg: Want resources inside
OV: Pos: But want development
OV: Pos: But want employment
OV: Pos: But want genl assistance
OV: Pos: But want involvement

OV: Pos: But want see animals
OV: Pos: But want to learn
OV: Pos: General
OV: Pos: We get employment

**POSITIVE CHANGES**

PC: Access to natural resources
PC: Collaboration/contact
PC: Community projects
PC: Education/training
PC: Employment
PC: Environment is being conserved
PC: Exposure
PC: Facilities and infrastructure
PC: Inter-cultural contact
PC: Other
PC: Personal enjoyment of reserve
PC: Pride
PC: Property value
PC: Revenue sharing
PC: Successful land claim

**RELATIONSHIP**

R: Actions taken/planned by reserve
R: Afraid of animals
R: Animals seen as food
R: Appreciate actions taken by reserve
R: Appreciate reserve/resources
R: Desire better rel with reserve/LC
R: Desire collaboration/communication
R: Difficult to define community
R: Dissatisfied with benefits
R: Lack of knowledge/information/access
R: Refs to other enviro concerns
R: Refs to poaching
R: Rel is fair to good
R: Request conservation education

**RESPONSIBILITY**

RP: Actions to encourage protection
RP: Ideas from LC to encourage protection
RP: LC afraid to report
RP: LC have no responsibilities
RP: LC Protect reserve
RP: LC protected reserve in the past
RP: Other
RP: Who to report to

## APPENDIX D: DATA CLEANING PROCESS FOR EACH QUESTION AND CODING RULES

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|---|
| Q1 | K | FGI | Only one mention per person was coded for 'K: Accommodation', 'K: Animals', 'K: Provides jobs', 'K: Tourism'. For all other codes within this question, a code could be used more than once for each participant, as long as the quotes differed. For example, one respondent may mention two different facts regarding 'K: Make-up & history of reserve', and these would be coded separately to capture the idea, but using the same code name mentioned above. I.e. that code name would have two quotations under it from that individual. In the same vein, someone may mention more than one resource that could no longer be accessed, and these would be coded separately. For example, *"We can't fish"* and *"Can't collect muti"* were coded separately under the code 'K: Resources: LC can't access'. | N/A |
| Q2-1 | R | FGI | These codes could generally be allocated to the same person twice as long as the idea was different. For example, if, under the code 'R: Dissatisfied with benefits' a participant mentioned *"There is less employment now"* and *"The reserve has deteriorated – we no longer have a clinic there",* these were coded separately since the point was to capture what they are dissatisfied about, or what they are expressing regarding their relationship with the reserve, rather than one quote per person. In the same way, for example, for the code 'R: Afraid of animals', different comments alluding to fear of animals were coded even if they came from the same individual.<br><br>In addition, the researcher encouraged wide contribution, which prevented one person from dominating. In most cases, the end result was a variety of contributions from different individuals.<br><br>Using codes from the same question (i.e. both with the prefix 'R') sometimes occurred for this question. This is referred to as 'double coding'. For example, a participant may mention fear of wild animals ('R: Afraid of animals') and that due to hunger people may poach ('R: Refs to poaching'); or that participants were afraid of animals ('R: Afraid of animals') and therefore wanted more information on what to do if animals jumped the | For the most part, these codes were allocated once per person/individual interview, except for those noted below.<br>For the code 'R: Actions taken/planned by the reserve', different actions mentioned by the same participant would be coded separately, for example a landowner in PGR mentioned a soup kitchen, Mandela Day and a community football match, etc. Hence this code was allocated three times within this question. If a respondent talked for long about one specific action (for example revenue sharing at MNR), then the entire section (with the interviewer's responses in between) would be coded together – but only once. When analysis took place – key quotes were extracted from within these longer quotations. For the code 'R: Refs to other enviro concerns', the same respondent may mention more than one environmental concern, and these would be coded separately to capture the various concerns.<br><br>Multiple use of one code for one participant also occurred with 'R: Rel is fair to good' (as a participant can verbalise this in various ways at different points within that question); 'R: Difficult to define community'; and 'R: Refs to poaching'. Although the latter code is from Q2-1 Rel, any other references to poaching in the context of the relationship between the |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|---|
| Q2-1<br>(continued) | R<br>(continued) | FGI<br>(cont.) | fence ('R: Desire collaboration/communication'). This also occurred with positive comments regarding relationships. For example, several participants mentioned that the relationship with the reserve was good ('R: Rel is fair to good') and then provided their reasoning, which was usually an action taken by the reserve which they appreciated, for example, schools being built, job opportunities and provisions in time of need ('R: Appreciate reserve/resources'). Where this occurs, the relevant codes are highlighted in the code query output documents so that the researcher is aware of this during analysis.<br><br>Another important coding rule is that if a benefit or positive change was not mentioned later under the questions on benefits and positive changes respectively, but it had been mentioned under Q2-1 Rel or elsewhere, then the particular benefit and/or positive change was coded under #Q2-1 Rel or elsewhere, so as not to lose this data. The same applies to losses and negative changes. | reserve and the community elsewhere in the interviews were also assigned this code.<br><br>Note that double coding does occur sometimes with different codes *within* this question, i.e the same quote may be allocated two codes with the prefix 'R'. For example, at PGR, a quote stating that the relationship is good because children can come and learn about nature would be coded with 'R: Rel is fair to good' as well as 'R: Appreciate actions taken by the reserve'. Where this occurs, the relevant codes are highlighted in the code query output documents so that the researcher is aware of this during analysis, so that it will not be unduly emphasised. |
| Q3-2 Pos changes | PC | FGI | In this question, the intent was to get an indication of how many people said things under each code. Hence it was important that, for each participant, each code was only used once. For example, if the same participant had two quotes for the code 'PC: Facilities and infrastructure', only one of these would be coded. In the majority of cases, individuals would only mention one positive change per code, and another would mention a different one. Exceptions to this (i.e. codes allocated more than once to an individual) are outlined below.<br>• For 'PC: Access to natural resources', in different parts of the interview (under this question), an individual may mention two *different* resources he/she can access.<br>• In the PGR data, one respondent also mentioned two *different* education/training initiatives (one being bursaries, the other being short courses for skills development).<br>• This also happened for 'Community projects', where *different* initiatives were mentioned by one individual and therefore the code was used twice. | In the individual interviews, it repeatedly occurred that respondents would mention more than one example of a positive or negative change belonging under a certain code. For example, in a DGR interview more than one example of education/training initiatives (coded under 'PC: Education/ training') was mentioned. Several respondents would talk about different community projects (coded under 'PC: Community projects') etc. It was important in this question to capture the myriad of positive and negative changes mentioned, hence each mention of a new positive or negative change from a certain participant was coded separately under the relevant code.<br><br>*Also see note **** below on 'double coding' between PC and B, and between NC and L.*<br><br>In this question, double coding occurred occasionally, where a quote would be coded with two 'PC' codes. For example, in the PGR data, a reference to communication and education – changing people's mindsets was coded with 'PC: Collaboration/contact' and 'PC: Education/training'. These cases are highlighted in the code query output documents so that the researcher is aware of this during analysis. |
| | PC<br>(continued) | FGI<br>(cont.) | | |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|---|
| Q3-2 Pos changes (continued) | | | | |
| Q3-2 Neg changes | NC | FGI | In this question, the intent was to get an indication of *how many* people said things under each code. Hence it was important to ensure that each participant was only coded once per code. For example, 'NC: Lack of access to reserve' – if the same respondent mentioned it twice, it would only be coded once. In the majority of cases, however, individuals only mentioned it once. The only code treated differently under this question was 'NC: Lack of access to natural resources'. In different parts of the interview (under this question), an individual may mention two resources he/she can no longer access. These were then coded separately. However, most of the time one respondent would only mention one resource, and another would mention a different resource. | See above. |
| Q4-3 | MP | FGI | Under these codes, the researcher captured the idea once per person. For example, if a participant mentioned a point belonging under 'MP: Development/infrastructure', it would only be coded once for that individual. This occurred for all the other codes under this question. In this question, the researcher wanted to see numbers, for example, to determine that 20 participants mentioned that more involvement/interaction would make them more positive towards the reserve. | Under these codes, the researcher wanted to capture the specific idea. If more than one idea was mentioned to make people more positive, and these ideas belonged under the same code, then they would be coded separately, using the same code. For example: an MNR participant mentioned two different community projects – a schools competition and the Fire Protection Association, which were both coded separately using 'MP: Community projects'. Similarly, in the PGR interviews, a participant gave different examples of development/infrastructure projects that would make people more positive. In another example, a DGR interviewee mentioned developing a picnic site, and that this realisation that locals can enter and enjoy DGR would increase positivity; and that, as news is spreading about the animals that locals are seeing, this is increasing positivity – both were coded separately under 'MP: Enjoyment of reserve'.<br><br>Note that double coding does occur with different codes *within* this question, for example: Phinda's programme to take the Chiefs to the lodges and give them the experience that tourists have, is coded under 'MP: Community projects' and 'MP: Enjoyment of reserve'; and the Phinda EEP Conser-vation Lessons programme is coded under 'MP: Community projects' and 'MP: Information/education'. These instances are noted within Atlas.ti. |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|---|
| Q5 | OV | FGI | Under these codes, the researcher captured the idea once per person. For example, if a respondent mentioned something belonging under the codes 'OV: Pos: But want to learn' or 'OV: Neg: Want land', it would only be coded once for that individual. Again, the researcher was seeking indications of how many people said a certain thing regarding others views. | N/A |
| Q6 | EX | FGI | Under these codes, the researcher captured the idea once per person. For example, if a participant's quotation belonged under the code 'EX: For: Parties/functions', it would only be coded once for that individual, even if he/she returned later to talk further about the party/function. Another example is the code 'EX: Feel ...' which aimed to capture different feelings experienced when participants had visited the relevant reserve. Each participant's feelings were coded once only. However, if a participant went into the reserve for more than one purpose on different occasions, e.g. for a game drive *and* for an awards ceremony (function), then these would be coded separately under their respective codes. | N/A |
| Q7-5 | RP | FGI | Coding depended on the code in question. For quotes belonging under the code 'RP: LC protect reserve' – protection actions were coded once per person, as no single individual mentioned more than one protective action. However, for codes such as ideas or actions to encourage protection – one person may have more than one idea, which would then be coded separately to capture all ideas. Generally though, one idea per person emanated from this question.<br><br>If a participant referred to himself/herself informing the community regarding the importance of conserving the reserve, this was also coded here. | After completing data cleaning for all three case studies, the two codes mentioned below remain the only cases of multiple coding (in the sense of using the *same code* more than once for an individual) for this question:<br><br>'RP: LC protect reserve': a respondent may mention more than one example of locals helping to protect reserve. This happened in MNR Interview 3, where the participant mentioned the community reporting poaching, and another comment further on suggesting that due to increased understanding of the reserve, locals feel more responsibility towards it. It occurred again in PGR Interviews 3 and 5 with different comments about the community protecting reserve.<br><br>'RP: Actions to encourage protection': in PGR Interview 1, 2 and 5, various actions were mentioned. In Interview 1 and 2, the code was used three times, and in Interview 5, twice.<br><br>Note that double coding does occur with different codes within this question – in the case of 'RP: Actions to encourage protection' and 'RP: LC protect reserve'. For example, at MNR, the Wild Coast project was an action taken that encourages protection; and people trained under this programme have |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|
| Q7-5<br>(continued) | RP<br>(continued) | FGI<br>(cont.) | become key informants who report fires, poachers, etc. ('LC protect reserve'). Another example is Phinda creating an extensive informer network (action to encourage protection) and then these informers provided information on crimes related to the reserve, poaching, etc. (LC protect reserve). These cases were highlighted in the code query output documents for the researcher's awareness during analysis. |
| Q8-6 | B | NGT This method cannot track how many notes each person generated or which respondent generated the particular note. Hence, with this method the idea is to generate numerous answers (one per note), and it is not relevant who generated which note and how many notes each person generated. Each note would therefore be allocated a relevant code, for example a note stating *'Environmental awareness since Mkhambathi is a declared biodiversity site'* would be coded under 'B: Learning/training: About environmental awareness/education'.<br><br>It was important here to avoid double coding at all costs because the number of post-it notes had to correspond with the number of quotes (1 quote per note). Double coding would throw out the data numbers in the tables (e.g. one quote double coded would mean one could end with a figure of 26 notes but 27 quotes). If something meaningful was mentioned that one wanted to capture in analysis, a note would be made in the list of quotes. For example, a participant might say 'Have fun and see animals'. The researcher had to choose whether to code under 'have fun' or 'see animals', but would make a note in the code query output document so as to not lose the other element in the analysis. | The point here was to capture all the different benefits. Most of the time a code was used once per person, in order to be able to get an idea of the extent to which certain benefits were mentioned. The only exceptions were when the benefits were different, yet belonged under the same code. Every effort was made in this question to limit the coding to a maximum of one use of each code per person. Examples of exceptions to this are outlined below.<br><br>For the code 'B: Learning/training: About environmental awareness/education', an MNR participant mentioned two fitting benefits, namely awareness created at the *Imbizos* (community meetings) and awareness created via Schools Competition; and DGR Interviewee 4 mentioned a science programme and school bush camps respectively. The same occurred (but only once) for the code 'B: Employment: Benefit from jobs', where MNR Interviewee 1 mentioned direct benefits from permanent employment and later mentioned contract work. The double mention for this same code in MNR Interview 3 is different because two people were interviewed together and each mentioned job opportunities as a benefit. In PGR data it occurred again a few times, e.g: in Interview 2, six different benefits were mentioned that fell under 'Tangible benefits for community structures: Sponsorships for community facilities', for example, clinics, HIV awareness programmes, OVC centres, poultry project and craft markets, while Interview 1 provided two examples under this code; Interviewees 1, 3 and 5 each had two examples of 'B: Tangible benefits for community structures: Support for schools and higher education'; in Interview 3, boreholes, roads and the water pipeline were coded separately under 'Facilities and |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|
| Q8-6<br>(continued) | B<br>(continued) | NGT<br>(cont.) | infrastructure: Improved infrastructure'; in Interview 2, two different examples of inter-cultural contact were mentioned and hence coded separately under 'Benefits from tourism/ tourists: Inter-cultural contact'; in Interview 1 and 3, two examples were provided on 'B: learning/training: About environmental awareness/education'; and in Interview 1 and 2, several examples were provided of 'Tangible benefits for community structures: Sponsorships for community facilities.<br><br>*Also see note **** below on 'double coding' between PC and B, and between NC and L.* |
| Q9-7 | L | NGT This method cannot track how many notes each person generated or which respondent generated the particular note. Hence, with this method the idea is to generate numerous answers (one per note), and it is irrelevant who generated which note and how many notes each person generated. Each note would therefore be allocated a relevant code, for example a note stating *"Can't visit graves of ancestors"* would be coded under 'L: Lack of access to natural resources: Can't access places of spiritual importance'. Although a grave is not a natural resource, this was the name given to this category as others referred to 'stones from rivers' which had religious significance and using the rivers for baptisms.<br><br>It was important here to avoid double coding at all costs – refer to note on double coding in line above. | A code was used once per person, in order to be able to gauge the extent of benefits. Every effort was made here to limit the coding to a maximum of one use of each code per person. After coding losses for all three case studies, no code was used twice for one individual within this question.<br><br>*Also see note **** below on 'double coding' between PC and B, and between NC and L.* |
| Q10-8<br>*** | D | FGI Under this question, the researcher captured one dream per person. She tried to get all respondents to verbalise their dream, but some participants chose not to answer. Dreams were categorised under various codes such as 'D: Interaction with reserve' and 'D: More development and employment'. If a respondent's dream had a section in it which belonged under another code, then two codes would be allocated to that dream to capture the elements within the dream. For example, the quotation: *'I will be happy if the game reserve can offer our children to drive inside this game lodge without paying something, you know. And also I would be happy if I myself can have a space for art gallery, art gallery, yes'* was coded under 'D: Community projects & financial aid' for the first part of the | In MNR interview 1, the codes 'D: Cons/tourism ethos spread into LC' and 'D: Community projects and financial aid' were used more than once. In both cases, participants provided different dreams that belonged under the same code. For example, relating to conservation and tourism ethos, the dream of having smaller tourism ventures throughout the villages was verbalised, and later the dream of encouraging locals to take conservation into their own hands by being involved with the rehabilitation of plants during the building of the N2 toll road into the Wild Coast was mentioned. Both were therefore coded separately.<br><br>The above two codes where the only codes used twice for the same individual across all three case studies. |

| Question number | Code prefix for this question | C1<br>FOCUS GROUP INTERVIEWS (FGI), MAPPING OR NOMINAL GROUPING TECHNIQUE (NGT) | | C2<br>INDIVIDUAL INTERVIEWS (II) |
|---|---|---|---|---|
| Q10-8 *** (continued) | D (continued) | FGI (cont.) | quotation; and 'D: Facilitate entrepreneurship' for the second part of the dream. | |
| QDrawings | DR | MAP | This exercise was done in their two focus groups at different times. While one group was being interviewed, the other group drew; and then vice versa. Drawing happened in a separate room and the two groups could not hear each other. Each code was only allocated once, and only codes applicable to the drawing were used. If, for example, a group did not draw any animals, then that would not be coded on that document. In terms of allocating a code only once, the researcher took a section of the drawing to represent the code. For example, if the group drew several human-made landmarks in different places in the map, the researcher only took one example of this and coded it. When analysis took place, she returned to the original maps and if, for example, there were several landmarks scattered throughout, then this would be mentioned in the text. | N/A |

| **KEY GENERAL** |
|---|
| C1 = Constituency 1 = Local community |
| C2 = Constituency 2 = Reserve staff |
| FGI = Focus Group Interview |
| II = Individual Interview |
| NGT = Nominal Grouping Technique |
| ***= In each case study, Focus Group 1 and 2 were combined for Q10-8, hence a separate recording was made, and a separate transcript produced that only dealt with this single question. |
| ****= In Q9-7 on Losses, respondents sometimes inferred that they had already mentioned this loss under Q3-2 Negative changes. In these cases, the researcher would return to the earlier mention of the loss, and code it as a loss, causing the quote to be double coded – as a loss and as a negative change. The researcher also returned to the earlier sections of the transcript to check if benefits or losses had been mentioned there, but not mentioned later under Q8-6 Benefits or Q9-7 Losses. It would then be coded under an earlier question to avoid losing this point. The same applies to Benefits (Q8-6) which had already been mentioned under Positive Changes (Q3-2). Hence, this is not double coding as such, but is done to capture these as losses/benefits. |
| Note: If respondents said something within a particular answer or in the beginning of the interview that related to another question elsewhere, then the codes for the relevant question would be assigned to that text, where logical, even though it came from elsewhere in the transcript. This ensured that valuable information was not lost. |

# APPENDIX E: ANALYSIS TOOLS

The same process was used for each case study. The abbreviation 'CS' is used to indicate 'Case Study'. However, in Atlas.ti, the family names will have the abbreviation for the actual case study (DK for Dinokeng; MK for Mkhambathi; and PGR for Phinda Game Reserve). The abbreviation of 'CS' can therefore be replaced by DK, MK or PGR, depending on which case study is being discussed. However, in this section, the analysis tools are generic across all three case studies and hence the term CS is used instead. The analysis was done using Atlas.ti 7. An upgrade (Atlas.ti 8) is now in use and hence some of the steps in this appendix may be different in the new version.

## ANALYSIS DONE FOR EACH CASE STUDY (CHAPTERS 4, 5 AND 6)

### QUESTION-BY-QUESTION ANALYSIS

#### Sections 4.3.1/5.3.1/6.3.1: Knowledge and experience

The following process was run for both the questions relating to knowledge and experience respectively:

*A filter was implemented so that only the relevant reserve's documents would be included. A query was then run by selecting all the codes which had been created when the answers to these questions (Knowledge and Experience respectively) had been coded (Open the code manager, select the relevant codes by holding down the shift key and scrolling down). By right clicking on the selected codes in Atlas.ti., 'Output' is selected, followed by 'Quotations for selected codes' or 'Selected quotation'. This delivers a report of all codes with all their quotations. When Atlas.ti produces this output, it orders all codes according to the document number, and not according to the code. The researcher therefore had to cut and paste each quotation under the relevant code. Prior to writing up the results, sorting and cleaning data occurred within these documents as outlined in Section 3.6.3. From these quotations, analysis then took place and certain quotes were selected to represent key points in the thesis. These documents have been termed 'Code query output documents' and are saved as outputs on the researcher's computer.

**Under 'Analysis' within Atlas.ti, the researcher opened the Codes primary document table, and selected all the codes falling under this question. She then selected the primary document family of 'CS C1 FGI', which amalgamated the results for Focus Group 1 and 2, and also selected the two documents which contained the coded transcripts of Focus Group 1 and 2 respectively. An Excel report was generated which showed how many quotes fell under each code for this question (for the focus groups separately and then cumulatively). From this excel report, a table was created. Keep in mind that all the codes are listed in Appendix C, but a code would not be included in the tables provided in Chapter 4, 5 and 6 if it had not been used to code a response within a particular case study.
The maps were also analysed as part of this question. This visual data was coded using Atlas.ti and discussed textually.

#### Sections 4.3.2/5.3.2/6.3.2: Relationship

The same was done as in * above for all codes with the prefix 'R' to produce the code query output documents.

***Using the Codes primary documents table, all the codes relating to this question (i.e. those with the prefix 'R') were selected; and the documents for 'CS_FG1_T_LC_date' and 'CS_FG2_T_LC _date', and the primary document families of 'CS C1 FGI' and 'CS C2 II' were selected. From the resulting excel document, a table was created showing columns for Focus Group 1, Focus Group 2, Focus Group 1 and 2 together, and Individual Interviews. This meant the researcher could compare the usage of codes (and their associated number of quotations) by individual focus group, combined focus group and the individual interviews.

#### Sections 4.3.3/5.3.3/6.3.3: Positive and negative changes

The same was done as in * above for all codes with the prefixes 'PC' and 'NC' to produce the Code query output documents.

The same was done as in *** above for all codes with the prefixes 'PC' and 'NC' to produce the table. The documents chosen remained the same as in **above.

### Sections 4.3.4/5.3.4/6.3.4: Increasing positivity

The same was done as in * above for all codes with the prefix 'MP' to produce the Code query output documents.
The same was done as in *** above for all codes with the prefix 'MP' to produce the table. The documents chosen remained the same as in **above.

### Sections 4.3.5/5.3.5/6.3.5: Others' views

The same was done as in * above for all codes with the prefix 'OV' to produce the Code query output documents.
The same was done as in ** above for all codes with the prefix 'MP' to produce the table. The documents chosen remained the same as in **above.

### Sections 4.3.6/5.3.6/6.3.6: Responsibilities

The same was done as in * above for all codes with the prefix 'RP' to produce the Code query output documents.
The same was done as in *** above for all codes with the prefix 'RP' to produce the table. The documents chosen remained the same as in ***above.

### Sections 4.3.7/5.3.7/6.3.7 and Sections 4.3.8/5.3.8/6.3.8: Benefits and losses

The tools used for 'Q8-6 Benefits' and 'Q9-7 Losses' were different from the previous questions because these questions involved the use of data gathering via NGT notes from C1, while the same questions were put to C2 in the form of individual interviews (as per the previous questions put to C2). For the NGT data collection, Focus Group 1 and 2 joined together. Each note contained one quote and was captured as a separate document, and coded within that document in Atlas.ti.

The questions on benefits and losses have three sections each, namely *the category*, *the category place*, and then the *actual benefits and losses*. The tools used to manage the three sections are different and are set out below. The same approach is followed to analyse the next question on losses (Sections 4.3.8, 5.3.8 and 6.3.8), and hence is discussed once below, but applies to both questions.

#### *Analysis tools: Benefit category and loss category*

The researcher set a global filter (Primary Document Manager) and right clicked on the document family called 'CS C1 PNG', which combines all documents produced by both focus groups during NGT. Then, in the Network View Manager, a new network view called 'CS LCs Benefit categories' was created. The nodes (codes) relating to the benefit category names were then imported. To determine which were not relevant to the case study under investigation (i.e. were used for other reserves, but not the one currently being analysed), one right clicks on each code in the code manager (or right clicks on the node in the network view and selects 'List quotations'. If no quotations appear for a code, it means that code/node is not applicable to that case study. This happened because the filter was set. If one removes the filter, all quotes relating to all reserves will once again be seen if you right click on any code in the Code Manager or right click on a node and select 'List quotations'. All nodes not relevant to the case study at hand were then right clicked and 'Remove from view' was selected. The same was done for the other network view created, namely 'CS Researcher's Benefit Categories', except that the filter was changed to include 'CS C1 PNG' and 'CS C2 II'. The two network views were created to compare how the categories determined by C1 (Figures 4.5, 5.5, 6.5) differed from those created by the researcher during the coding process (Figures 4.6, 5.6, 6.6), and which also took into account what C2 had said about benefits. The same process was followed for loss category, the results of which are shown in Sections 4.3.8, 5.3.8 and 6.3.8.

*Analysis tools: Benefit category place and loss category place*

To produce a table documenting all the category places, the researcher ran a query for each code relating to category place, i.e. all the codes with the prefix 'B Cat. Place (8-6 CS)' were selected one at a time. By double clicking on the code, the quotations associated with that code pop up. The researcher then clicked on each quotation in turn which took one to the original document. From those documents, one could see what category had been given that placing, and how many post-it notes were in that category. For example, the code 'B Cat. Place (8-6 CS): 2' refers to that case study's benefit category coming in at second place of importance. By following the above steps, one could go to the original documents and see, for example, that they referred to the category 'Being able to collect thatch grass' and that there were 12 notes in this category. Alternatively, if it was a C2 participant that had ranked a benefit, then one would be taken to the original interview transcript and could see what benefit category the ranking was referring to. The benefit category and its placing were then put manually in table format (see Tables 4.17, 5.17, 6.17). The same process was followed for loss category place/rank, the results of which are shown in Sections 4.3.8, 5.3.8 and 6.3.8. The only difference for losses is that C2 were not asked to rank these.

*Analysis tools: Actual benefits and losses*

A filter was implemented to include only data relevant to C1 NGT and C2 II. Then the process as per * and *** was followed, except that the primary document families chosen were 'CS C1 PNG' AND 'CS C2 II'. Adaptations were made to this table: totals column included; sub-totals of each category of codes were totalled (shaded in grey and italicised); the heading for each category of codes was shaded in grey; and the top three benefits were bolded. Hence it differs from the tables used up to this point.

**Sections 4.3.9/5.3.9/6.3.9: Dreams**

For this final question, the two focus groups were still combined (as they had been for the NGT session). The question was asked to the group in the form of a focus group interview and recorded. Later this was transcribed and then coded. The transcribed document was called 'CS_FG1&2_T_LC_date'. Under 'Analysis', in the 'Codes primary document table', all the dream codes (with the prefix 'D') were selected and the documents of 'CS_FG1&2_T_LC_date' and C2 II. A report was created and from this Tables 4.23, 5.23 and 6.23 respectively.

A filter was then put on to include only the case study being dealt with, and, in the Code Manager, all dream codes were selected, and the output of 'Quotations for selected codes' was chosen. From this the Code query output document was created, and from here, quotes were pasted into Tables 4.24, 5.24 and 6.24 respectively.

**CROSS-QUESTION ANALYSES**

**4.3.10.1/5.3.10.1/6.3.10.1: Comparisons across questions: Benefits, Losses, Positive changes and Negative changes**

In the family manager, code families were made for each question used in the comparison below, e.g. all codes for Q8-6 Losses were put into one family. When a code family is used in the Codes Primary Document Table, one will not see the number of quotations for each individual code, but will be able to obtain the total number of quotes for all the codes in that question. Using the Codes Primary Document table, the code families created (as described above) for the relevant questions were put into the codes column. In the documents column, the document family for CS C1 FGI and CS C1 PNG was used to create the table from which Figures 4.9, 5.9 and 6.9 were created (Cross-question comparison: C1).

In the next comparison, the code families stayed the same, but C2 II was added to the documents column, along with C1 PNG and C1 FGI. From this data, Figures 4.10, 5.10 and 6.10 were created (Cross-question comparison: C1 and C2).

### 4.3.10.2/5.3.10.2/6.3.10.2: Comparing frequencies of answers: Relationship, Negative changes, Positive changes, More positive, Responsibilities, Benefits and Losses

Using the code families for each code, and the relevant primary document families, a table was created in excel, from which the scatter graphs were drawn (Figures 4.11, 5.11 and 6.11).

### 4.3.10.3/5.3.10.3/6.3.10.3: Most common words used

The following process was followed to produce a word cloud of the most common words used in all the textual data for each case study (i.e. transcripts from focus group interviews, individual interviews as well as NGT notes). A global filter was first set to ensure that only the documents for the case study at hand were included. The Word Cruncher tool in Atlas.ti was used to scan all the documents capturing the responses for the relevant case study. All columns in the resultant excel spreadsheet were deleted except for the 'Words' and 'Total Count' columns. The latter reports on the number of times each word was used. By using the 'Sort' function in excel for 'Total Count', the values are ordered from smallest to greatest. The list was then cleaned in terms of removing words such as 'and' and 'the', and deleting all words occurring less than 20 times. Words such as 'job' and 'jobs', 'lodge' and 'lodges', 'benefit' and benefits' and 'kids' and 'children' were combined. i.e. a cumulative total awarded for the word. An excel formula: *=REPT(CONCATENATE(A2," "),B2)* was then applied to put it into the correct format for the word cloud programme (for example, changing 'Community: 60' to the word 'community' repeated sixty times). This process was followed: Insert a line above the first word in the list and leave a column open after 'total count' column > Click on this empty D2 cell > fill in the formula in the white rectangle above > drag the cross at the bottom right of D2 to the end of the list > enter > select and copy this text > go to www.wordclouds.com > Select 'word list' > 'paste/type text' (at the top in blue text) > right click > paste > 'apply' (bottom right) > choose settings accordingly for colour, shape, font, word direction, etc. > go to 'File' on top bar > 'Save as png > copy and paste word cloud into chapter (Figures 4.12, 5.12, 6.12).

## FOR CROSS-CASE ANALYSIS (CHAPTER 7)

For questions which were only asked to C1, in Atlas.ti, the Codes primary documents table was selected from 'Analysis tools'. The relevant codes were clicked over to the right hand column, followed by the relevant document family: DGR C1 FGI, MNR C1 FGI and PGR C1 FGI. A report was created which provides a table in excel. From this table, a bar graph was created. Each reserve was given a different colour.

For questions asked to C1 and C2, a slightly different approach was followed to best present a more complex picture. In Atlas.ti, the Codes Primary Documents Table was selected from 'Analysis tools'. The relevant codes were clicked over to the right hand column, followed by the relevant document family: DK C1 FGI, DK C2 II, MK C1 FGI, MK C2 II, PGR C1 FGI AND PGR C2 II. A report was created which provides a table in excel. This table was then re-ordered manually, so that each reserve would have their own row under each code. The columns were changed to become C1 and C2 respectively. Codes were also ordered from left to right in descending order, i.e. the most used code would be the first set of columns. From this table, a bar graph was created. Each reserve was labelled on the X axis for each code, and C1 and C2 were given their usual colours of green and peach respectively. Data labels were added beneath each code to be able to see the total for each code.

To create the colour-coded benefits/losses tables, information was drawn from Chapters 4, 5 and 6.

The cross-question analyses bar graphs came from tables that were created manually in excel, inputting the totals from the various chapters.

## APPENDIX F: ETHICAL CLEARANCE CERTIFICATE

UNISA university of south africa

**CAES RESEARCH ETHICS REVIEW COMMITTEE**

Date: 10/02/2015

Ref #: **2015/CAES/016**
Name of applicant: **Ms DR Queiros**
Student #: **55777767**

Dear Ms Queiros,

**Decision: Ethics Approval**

**Proposal:** Towards pro-conservation behavior by local communities: Interactive qualitative analysis of ecotourism case studies in protected areas in Southern Africa

**Supervisor:** Prof K Mearns

**Qualification:** Postgraduate degree

Thank you for the application for research ethics clearance by the CAES Research Ethics Review Committee for the above mentioned research. Final approval is granted for the duration of the project, **subject to submission of permission letters from the relevant local authorities, community leaders and tourism organisations**.

Please consider point 4 below for further action.

*The application was reviewed in compliance with the Unisa Policy on Research Ethics by the CAES Research Ethics Review Committee on 10 February 2015.*

*The proposed research may now commence with the proviso that:*

1) *The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
2) *Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the CAES Research Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*

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3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*
4) *Once the study areas have been identified, permission letters must be obtained and submitted to the Committee before data gathering may commence. Permission is needed from the relevant local authorities, community leaders and tourism organisations.*

*Note:*

*The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the CAES RERC.*

Kind regards,

Signature
CAES RERC Chair: Prof EL Kempen

Signature
CAES Executive Dean: Prof MJ Linington

# APPENDIX G: INTRODUCTORY LETTERS TO COMMUNITY LEADERS AND RESERVE MANAGERS

Date …

To whom it may concern

I, Dorothy Queiros, am doing research towards my PhD in Environmental Sciences at the University of South Africa (Unisa). My supervisors are Prof Kevin Mearns (Department of Environmental Sciences) and Prof Cine van Zyl (Tourism Management Section, Department of Transport Economics, Logistics and Tourism).

The title of my research is:
**Towards pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa**

We currently have an inadequate understanding of what encourages pro-conservation attitudes and behaviour in local communities bordering protected areas in South Africa. A more complete understanding of what impacts pro-conservation behaviour can contribute to improved achievement of the dual goals of biodiversity conservation and livelihood production for communities living in and around protected areas. *I am excited about the potential contribution of this research both to conservation efforts and to the good of local communities in our country.*

My research involves qualitative studies, and I plan to conduct case studies among separate groups of participants in various protected areas in South Africa. The final outcome of the research will be a framework that integrates the insights generated by participants in all the case studies.

**I would be honoured if ..... Community/Reserve could be one of the case studies in this research. The community and reserve will receive a detailed report of the findings.**

Let me tell you more about the study ....

**1.** There are **three groups of people** I would need to talk to:

- *1. Nature conservation authorities and 2. Tourism managers/operators involved in running the tourism venture at the reserve* (via individual face-to-face interviews). In addition, these individuals need to have *worked with/been involved with the local community*. Selection of these individuals can be at the discretion of the reserve manager. Questions to these participants will be about their perceptions of the relationship between the local community and the environment/nature reserve.
- *3. Local community members who live in the community closest to the reserve* (via focus groups in which I will use group interviews, brainstorming techniques, and drawings). To be consistent with the other case studies where data has been collected, this research needs to be with the community who *live the closest to the reserve.*

**2. Requirements for local community participants**

- I would need the local headman/community leader to select a group of twenty (20) local community members who live in or nearby the protected area.

- The group needs to have a mix of age and gender; as well as participants who are fairly good in English.
- The group needs to contain a mix of society, for example, not all be community leaders.
- Participants would need to be above the age of 18.
- I can meet participants at a venue that is convenient for them.
- I would need a morning of their time (8:30 am to 2pm) and I will provide a tea time snack and lunch. In discussion with the reserve manager and community leader, the catering could be outsourced to ladies from the community and I will pay them.
- A local person who is very good in English and the local dialect who can act as my translator is essential. I will pay this person for their services.
- Participants' names will not be attached to the information they provide. They will remain anonymous.

**3. Interview guide**

The following questions will be used to guide the research for the local community participants:

1. What do you know about this nature reserve? What is inside this nature reserve? What can you do in there?
2. Tell me about the relationship between you and the nature reserve/ How do you feel about living in/near the nature reserve?
3. How has the nature reserve changed the way you live (positive and negative)? If so, how have things changed?
4. Some people like this nature reserve and the animals. Some people think there are better ways to use this land. What would make you more positive towards the nature reserve being conserved over the next 100 years, that is, down to the time of your great-grandchildren?
5. Who of you have been into the reserve? What do you go in for?
6. Do you have any responsibilities for this nature reserve? If you do, how do you feel about these?
7. What are the benefits of having this nature reserve near to your home? Which of those benefits are most important to you? Which are least important?
8. What are the costs/negatives of having nature reserve X near to your home? Which of those costs impact the most on you? Which ones impact the least?
9. [43]What actions do you take every day or most days that you think are good for the environment?
10. What actions do you take every day or most days that you think are bad for the environment?
11. What actions do you see others taking that you think are good for the environment?
12. What actions do you see others taking that you think are bad for the environment?
13. For you, living near this nature reserve, what is your ideal future for your community? What is your dream situation?

The following questions will be used to guide the research for the nature conservation authorities and tourism managers/operators:

1. Tell me about your perceptions of the relationship between the local community and the nature reserve.
2. How do you think the nature reserve has changed the way the local community lives (positive and negative)? If so, how have things changed?

43. Questions 9-12 for C1 and Questions 8 and 9 for C2 did not form part of the final write-up of this PhD research.

3. What do you think would make the local community more positive towards the nature reserve being conserved in the future?
4. What do you think would make it easier for local people to be part of looking after this nature reserve in the future?
5. Do the local community have any responsibilities for/towards this nature reserve? If they do, how do you think they feel about these?
6. What are the benefits to the local community of living near/in this nature reserve? Which of those benefits do you think are most important to them? Which are least important?
7. What are the costs to the local community of living near/in this nature reserve? Which of those costs do you think impact the most on them? Which ones impact the least?
8. What actions do you see the members of the local community taking every day or most days that you think are good for the environment?
9. What actions do you see the members of the local community taking every day or most days that you think are detrimental to the environment (bad for the environment)?
10. For this local community, living near/in this nature reserve, do you have any ideas on what could be an ideal future for them?

**4. Ethical clearance**

The research has been given ethical clearance by the College of Agricultural and Environmental Sciences of Unisa. Each participant will need to sign an informed consent form. This provides information to participants such as: the research is anonymous; their name will not be attached to the information in any way; they are free to withdraw from the interview or focus group at any time, etc.

I would be delighted if …… could form part of this research. If yes, please will you fill in and sign "Permission Letter A: For reserve manager or relevant nature conservation authority" or Permission Letter B: For the local community leader. The ethics committee at Unisa require both letters to be signed before we can begin the research.

If you have any further queries, you are welcome to contact any of the people below:

- Primary researcher: Dorothy Queiros (queirdr@unisa.ac.za; 012 433 4667)
- Supervisor: Prof Kevin Mearns (mearnkf@unisa.ac.za; 011 471 2973)
- Co-supervisor: Prof Ciné van Zyl (vzylc@unisa.ac.za; 012 433 4698)

Kind regards

Dorothy Queiros

## APPENDIX H: PERMISSION FROM COMMUNITY LEADER (C1) TO CONDUCT RESEARCH

Date

Dear Community Leader at …

I, Dorothy Queiros, am doing research towards my PhD in Environmental Sciences at the University of South Africa (Unisa). My supervisors are Prof Kevin Mearns (Department of Environmental Sciences) and Prof Ciné van Zyl (Tourism Management Section, Department of Transport Economics, Logistics and Tourism). The title of my research is: **Towards pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa.**

The aim of the research is to improve current understanding of what encourages pro-conservation attitudes and behaviour in local communities bordering protected areas in South Africa. The final outcome of the research will be a framework that can contribute to improved achievement of the dual goals of biodiversity conservation and livelihood production for communities living in and around protected areas. The study is qualitative and involves various protected areas in South Africa as separate case studies. Participants will include local community members, conservation authorities and managers/operators of the tourism offerings within the protected area. A more detailed information sheet has accompanied this letter.

If you agree to your community forming part of this study, please fill in the table below.

If you have any further queries, you are welcome to contact any of the people below:

- Primary researcher: Dorothy Queiros (queirdr@unisa.ac.za; 012 433 4667)
- Supervisor: Prof Kevin Mearns (mearnkf@unisa.ac.za; 011 471 2973)
- Co-supervisor: Prof Ciné van Zyl (vzylc@unisa.ac.za; 012 433 4698)

Thank you very much for your time and willingness to be part of this valuable research.

Kind regards

Dorothy Queiros

| Name | Position in community | Name of community | I hereby agree that my community can form part of the abovementioned study |
|---|---|---|---|
| | | | _____<br>Signature<br><br>_____<br>Date |

## APPENDIX I: PERMISSION FROM RESERVE MANAGER (C2) TO CONDUCT RESEARCH

Date

Dear …

I, Dorothy Queiros, am doing research towards my PhD in Environmental Sciences at the University of South Africa (Unisa). My supervisors are Prof Kevin Mearns (Department of Environmental Sciences) and Prof Ciné van Zyl (Tourism Management Section, Department of Transport Economics, Logistics and Tourism). The title of my research is: **Towards pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa.**

The aim of the research is to improve current understanding of what encourages pro-conservation attitudes and behaviour in local communities bordering protected areas in South Africa. The final outcome of the research will be a framework that can contribute to improved achievement of the dual goals of biodiversity conservation and livelihood production for communities living in and around protected areas. The study is qualitative and involves various protected areas in South Africa as separate case studies. Participants will include local community members, conservation authorities and managers/operators of the tourism offerings within the protected area. A more detailed information sheet has accompanied this letter.

If you agree to … Reserve forming part of this study, please fill in the table below.

If you have any further queries, you are welcome to contact any of the people below:

- Primary researcher: Dorothy Queiros (queirdr@unisa.ac.za; 012 433 4667)
- Supervisor: Prof Kevin Mearns (mearnkf@unisa.ac.za; 011 471 2973)
- Co-supervisor: Prof Ciné van Zyl (vzylc@unisa.ac.za; 012 433 4698)

Thank you very much for your time and willingness to be part of this valuable research.

Kind regards

Dorothy Queiros

| Name | Position/designation | I hereby agree that … Reserve can form part of the abovementioned study |
|---|---|---|
| | | _____<br>Signature<br><br>_____<br>Date |

## APPENDIX J: INFORMED CONSENT FOR C1 PARTICIPANTS

Dear Participant

I, Dorothy Queiros, am doing research for my doctoral study in Environmental Management at Unisa. The study is about understanding pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa.

You have been chosen to participate because you live nearby a protected area. I would greatly appreciate a morning of your time to learn about you and your relationship with this protected area.

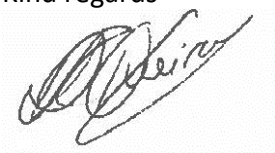
Participation is voluntary and confidential. Your name will not be recorded in any reports or publications from the results. There is no penalty or loss of benefit if you decide not to participate; and no reward or payment for participation. You are free to withdraw at any time without giving a reason. Information from the study will be stored on my computer for five years.

This study has received written approval from the Research Ethics Committee of the College of Agricultural and Environmental Sciences at Unisa. If you would like to see this approval letter or have any questions, please contact me or my supervisors:

- Primary researcher: Dorothy Queiros (queirdr@unisa.ac.za; 012 433 4667)
- Supervisor: Prof Kevin Mearns (mearnkf@unisa.ac.za; 011 471 2973)
- Co-supervisor: Prof Ciné van Zyl (vzylc@unisa.ac.za; 012 433 4698)

Thank you very much for participating in this study! I look forward to the morning with you!

Kind regards



Dorothy Queiros

……

**CONSENT TO PARTICIPATE**

- I have read and understood the study as explained above.
- I understand that my participation is by choice and that I am free to leave at any time without penalty.
- I know that the findings of this study will be anonymously written up in a doctoral thesis, journal publications and/or conference papers.

| Name | | Name of community | Signature | Cell phone number |
|---|---|---|---|---|
| | | | | |
| **Gender** | | **Age** | | |
| **Female** | **Male** | | | |

- Please keep page 1
- Hand page 2 back to the researcher

## APPENDIX K: INFORMED CONSENT FOR C2 PARTICIPANTS

Dear Participant

I, Dorothy Queiros, am doing research for my doctoral study in Environmental Management at Unisa. The study is about understanding pro-conservation attitudes and behaviour by local communities bordering protected areas in South Africa.

You have been chosen to participate because you are involved in conservation or tourism in this protected area. I would greatly appreciate approximately half an hour of your time to hear how you perceive the relationship between the local community and the adjacent protected area.

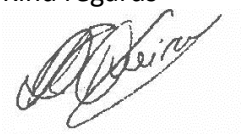
Participation is voluntary and confidential. Your name will not be recorded in any reports or publications from the results. There is no penalty or loss of benefit if you decide not to participate; and no reward or payment for participation. You are free to withdraw at any time without giving a reason. Information from the study will be stored on my computer for five years.

This study has received written approval from the Research Ethics Committee of the College of Agricultural and Environmental Sciences at Unisa. If you would like to see this approval letter or have any questions, please contact me or my supervisors:

- Primary researcher: Dorothy Queiros (queirdr@unisa.ac.za; 012 433 4667)
- Supervisor: Prof Kevin Mearns (mearnkf@unisa.ac.za; 011 471 2973)
- Co-supervisor: Prof Ciné van Zyl (vzylc@unisa.ac.za; 012 433 4698)

Thank you very much for participating in this study! I look forward to talking to you!

Kind regards



Dorothy Queiros

……

**CONSENT TO PARTICIPATE**

- I have read and understood the study as explained above.
- I understand that my participation is by choice and that I am free to leave at any time without penalty.
- I know that the findings of this study will be anonymously written up in a doctoral thesis, journal publications and/or conference papers.

| Name | Position at protected area | Signature | Cell phone number |
|---|---|---|---|
| | | | |

| Gender | | Age |
|---|---|---|
| Female | Male | |

- Please keep page 1
- Hand page 2 back to the researcher

## APPENDIX L: CERTIFICATE OF EDITING


**SHARON (SHEYNE) R BALL** TTD (JCE)

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7 October 2019

### CERTIFICATE OF EDITING

To whom it may concern

This certifies that I have edited the thesis, TOWARDS PRO-CONSERVATION ATTITUDES AND BEHAVIOUR BY LOCAL COMMUNITIES BORDERING PROTECTED AREAS IN SOUTH AFRICA, by Dorothy Ruth Queiros.
This document is to be submitted in accordance with the requirements for the degree of Doctor of Philosophy in the subject Environmental Management at the University of South Africa.

**Disclaimers**

1. I focused on language issues, including grammar, tenses, subject-verb agreement, punctuation, and consistency with regard to UK spelling.
2. I gave attention to the word order where necessary and made suggestions to improve the flow of the story line.
3. A complete edited copy was provided to the author. Final decisions rest with the student as to which suggestions to implement.

SR Ball

**Sheyne R Ball**
Language editor